

The Role of Knowledge Management in Mediating the Relationship Between Absorptive Capacity and Open Innovation and Its Impact on Organizational Performance

Prima Yulianti¹, Masruri²

^{1,2}Faculty of Economics and Business, Dharma Andalas University, Padang, West Sumatra, Indonesia

ABSTRACT: This study aims to analyze the influence of absorptive capacity, open innovation, and knowledge management on organizational performance in MSMEs in Padang City. The study focuses on the role of knowledge management as a mediating variable in the relationship between absorptive capacity and open innovation on organizational performance. The research method uses a quantitative approach with a survey through a questionnaire distributed to 200 MSMEs in Padang City. Data were analyzed using Partial Least Squares-Structural Equation Modeling (PLS-SEM). The results show that absorptive capacity positively and significantly affects knowledge management and organizational performance. Furthermore, knowledge management has a positive and significant effect on organizational performance. However, open innovation only has a positive and significant effect on knowledge management, but not a significant effect on organizational performance, thus confirming the importance of knowledge management as a mediating mechanism. These findings support the Knowledge-Based View (KBV), which emphasizes knowledge as a strategic resource to increase competitiveness. This study recommends that MSMEs strengthen knowledge management to adapt to competition dynamics.

KEYWORDS: Human Capital, Innovation Culture, Open Innovation, Business Performance

I. INTRODUCTION

Micro, Small, and Medium Enterprises (MSMEs) are economic growth and development catalysts in various countries (Ta'Amna et al., 2023). MSMEs are important in increasing community income, reducing unemployment, and promoting social welfare (Susdiani, 2020). Unsurprisingly, MSME development has become a strategic focus for the government as part of its efforts to strengthen the national economy. However, despite the increasing number of MSMEs, improvements in quality remain uneven. Many MSMEs in Indonesia face the classic problem of low productivity, influenced by internal factors such as weak human resource quality, technological limitations, managerial limitations, and limited access to capital and markets. Meanwhile, external factors such as high transaction costs, an unfavorable business climate, and dependence on raw materials also add to the challenges (Zulva Riani, 2011). This condition impacts the low organizational performance of MSMEs, especially in Padang City.

Achieving and maintaining superior performance is the primary goal of every organization (Ozgun et al., 2022). Organizational performance reflects the organization's success in realizing its vision, mission, and strategy by creating valuable products or services. However, performance cannot be separated from the organization's ability to innovate (Rumanti, 2021). In this context, open innovation (OI) is an important strategy for MSMEs. OI enables the flow of knowledge into and out of the organization to accelerate product and process innovation (Chesbrough, 2020; Singh et al., 2021a). Several studies show that the implementation of OI contributes positively to organizational performance (Fetrati et al., 2022; Rumanti et al., 2023; Yulianti & Masruri, 2024). However, the implementation of OI in MSMEs does not always run smoothly due to limited resources, organizational structure, and access to external networks (Radziwon & Bogers, 2019).

Apart from OI, another important factor that influences organizational performance is absorptive capacity (ACAP), namely the organization's ability to recognize the value of external knowledge, assimilate it, and utilize it for strategic purposes (Ahn et al., 2015). ACAP has proven to be a prerequisite for the success of open innovation (Zhou, KZ, & Li, 2020; Zubielqui, 2019). In practice, ACAP strengthens an organization's capacity to manage external knowledge and transform it into valuable innovation. Therefore,

The Role of Knowledge Management in Mediating the Relationship Between Absorptive Capacity and Open Innovation and Its Impact on Organizational Performance

the relationship between ACAP, OI, and organizational performance is important in strategic management. However, its discussion in the context of MSMEs, particularly in developing countries, is still relatively limited.

This is where knowledge management (KM) plays a crucial role. KM is a mechanism that enables organizations to systematically acquire, store, share, and utilize knowledge to enhance innovative capabilities (Nonaka, 2009). Previous research shows that KM contributes to organizational performance, but most studies still examine its role partially, without looking at its interaction with ACAP and OI (Carrasco-Carvajal et al., 2023). In fact, from the Knowledge-Based View (KBV) perspective, knowledge is the main strategic resource that underlies competitive advantage. (Barney, 1991). KBV emphasizes that effective knowledge management enables organizations to adapt to uncertain environmental dynamics and capitalize on innovation opportunities. Thus, KM can potentially be a mediating variable that bridges the relationship between ACAP and OI on MSME organizational performance.

Based on the above review, this study offers novelty in two aspects. First, this study fills the gap by simultaneously analyzing the influence of absorptive capacity and open innovation on organizational performance through the mediation of knowledge management. Second, this study focuses on the context of MSMEs in Padang City, a developing country that is still rarely studied, while most previous studies have focused on large companies in developed countries (Vanhaverbeke et al., 2018; Sengupta & Sena, 2020). Therefore, this study examines the influence of absorptive capacity and open innovation on organizational performance, with knowledge management as a mediating variable, in MSMEs in Padang City. This research is expected to provide theoretical contributions to developing KBV-based strategic management literature and practical implications for developing the competitiveness of MSMEs in Indonesia.

Based on the above analysis, this study focuses on absorptive capacity and open innovation, as well as the role of knowledge management as a mediating mechanism in improving organizational performance among MSMEs in Padang City. The perspective used is the Knowledge-Based View (KBV), which emphasizes that knowledge is a key strategic resource for creating and maintaining competitive advantage (Barney, 1991).

II. CONCEPTUAL FRAMEWORK AND HYPOTHESIS DEVELOPMENT

Absorptive capacity and knowledge management

Previous studies by Arifin & Hartono (2025) show that absorptive capacity directly increases open innovation, strengthens MSMEs' performance in Indonesia, and supports the KBV framework that knowledge is a strategic capability. (Ramadhan et al., 2024) also found that absorptive capacity strengthens customer knowledge management capabilities, which mediates project success in SMEs. Furthermore, a study by Putra & Hartono (2024) reaffirms that absorptive capacity and open innovation positively affect MSME performance. On the other hand, Choirunnisa and Nursyamsiah (2025) found that absorptive capacity significantly impacts innovation even though KM has not been shown to have a direct effect, indicating the need for a more complex mediation approach. Perspectives that enrich KBV theory come from (Siregar et al., 2024), which explains the importance of knowledge breadth and depth in strengthening ACAP and driving SME innovation performance. Based on the explanation above, the following hypothesis can be formulated:

H1: Absorptive capacity significantly influences knowledge management.

Absorptive capacity and organizational performance.

From the knowledge-based (KBV) perspective, an organization's ability to absorb, assimilate, and utilize external knowledge (absorptive capacity) is a strategic factor determining organizational performance (Cohen & Levinthal, 1990; Zahra & George, 2002). High absorptive capacity enables MSMEs to capitalize on market opportunities, accelerate innovation, and improve operational effectiveness. Recent research supports this relationship (Siregar et al., 2024). Absorptive capacity plays an important role in driving the innovation performance of MSMEs. Likewise, (Choirunnisa & Nursyamsiah, 2025) confirms that ACAP is the main driver of performance improvement based on sustainable innovation. This finding is consistent with the study (Liao, 2020). Based on the explanation above, the following hypothesis can be formulated:

H2: Absorptive capacity significantly influences organizational performance.

Knowledge management and organizational performance.

From the knowledge-based (KBV) perspective, knowledge is considered a key strategic resource that enables organizations to achieve a sustainable competitive advantage (Grant, 1996; Spender, 1996). Knowledge management (KM) is a crucial tool for managing this knowledge by effectively creating, organizing, storing, and utilizing information. Successful KM implementation enables organizations to accelerate decision-making, enhance innovation, and strengthen adaptability to the dynamic business environment. Numerous empirical studies support the relationship between KM and organizational performance. (Sunaryudanto & Rofiaty, 2024) Found that implementing KM significantly impacts the performance of MSMEs, especially when facing digital

The Role of Knowledge Management in Mediating the Relationship Between Absorptive Capacity and Open Innovation and Its Impact on Organizational Performance

transformation. (Isa & Rahmah, 2023) emphasizes that KM improves organizational performance by strengthening dynamic capabilities, whereas Liu et al. (2023) confirm that KM technology positively impacts financial and non-financial performance, particularly in developing countries. In addition, Darmawan et al. (2023) confirm that human capital can strengthen the effect of KM on organizational performance. Based on the explanation above, the following hypothesis can be formulated:

H3: Knowledge management significantly influences organizational performance.

Open innovation and knowledge management.

Open innovation refers to a situation where innovating companies do not only rely on their internal sources but also manage knowledge and share information from anywhere for innovation within the organization (Ta'Amnha et al., 2023). Knowledge management (KM) is required for this process to run effectively, which functions to create, organize, use, and share knowledge collectively within the organization. KM is crucial in driving product innovation performance, particularly in developing countries where MSMEs still face challenges in adopting it (Khan & Arshad, 2024; Le & Lei, 2019). Previous research confirms that integrating external knowledge through KM can increase innovation capabilities and competitive advantage (Freixanet, 2021; Tariq & Ding, 2018). In addition, KM facilitates market information that forms the basis for open innovation practices (Naseer, 2021). Thus, open innovation contributes to strengthening knowledge management within organizations. Based on the explanation above, the following hypothesis can be formulated:

H4: Open innovation significantly influences knowledge management.

Open innovation and organizational performance.

Open innovation must always be linked to company strategy (Barham et al., 2020). In the case of MSMEs, this will facilitate changes in their business models, thereby supporting their performance (Ramírez-Solis et al., 2022). There is substantial evidence that open innovation positively affects several firm performance metrics (Hossain & Kauranen, 2016; Kraus et al., 2020; Torres de Oliveira et al., 2020). Open Innovation provides many benefits that impact the performance of MSMEs (Parida et al., 2012; Torchia & Calabrò, 2019). Companies are working to adopt open innovation to improve company performance (Singh et al., 2021b). Based on the explanation above, the following hypothesis can be formulated:

H5: Open innovation significantly influences organizational performance.

Knowledge management mediates absorptive capacity and open innovation on organizational performance.

Absorptive capacity drives strategies for firms to acquire and assimilate external knowledge during innovation (Kim et al., 2015). It strengthens key functional areas within a company and is essential for transforming external knowledge into innovation. Furthermore, it enables companies to explore new business opportunities and strategies to differentiate themselves and build their reputation. Absorptive capacity encompasses four dimensions: acquisition, assimilation, transformation, and exploitation (Carrasco-Carvajal et al., 2023). Companies that acquire, assimilate, modify, and leverage external knowledge are better equipped to innovate and explore new business models. Companies that effectively manage knowledge rely on their ability to explore and recognize the value of new external knowledge, exploiting, assimilating, and applying it commercially (Naqshbandi & Tabche, 2018). This firm's ability, known as absorptive capacity, is crucial for seeking and acquiring knowledge for innovation. Several recent studies highlight the role of absorptive capacity in innovation success (Rangus et al., 2017). Empirically demonstrates how an organization's absorptive capacity interacts with its capacity for open innovation to achieve desired company performance. Based on the explanation above, the following hypotheses can be formulated: H6: Knowledge management mediates the relationship between absorptive capacity and organizational performance, H7: Knowledge management mediates the relationship between open innovation and organizational performance.

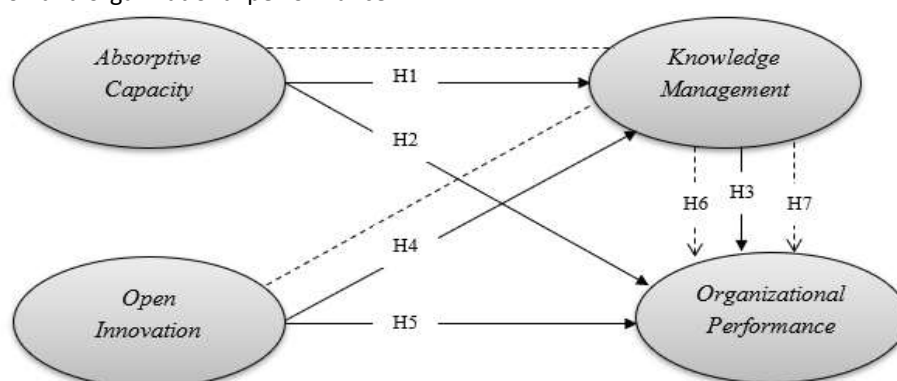


Figure 1. Conceptual Framework

The Role of Knowledge Management in Mediating the Relationship Between Absorptive Capacity and Open Innovation and Its Impact on Organizational Performance

III. METHODOLOGY

This study aims to analyze the role of knowledge management as a mediating variable in the relationship between absorptive capacity and open innovation and its impact on organizational performance in MSMEs in Padang City. The study used a quantitative approach with a survey method by distributing questionnaires to MSME actors. The research instrument was developed based on a literature review, with several items modified to suit the research context. As recommended, all constructs were measured using a five-point Likert scale (1 = strongly disagree to 5 = strongly agree) (Hair et al., 2021). Primary data was collected directly from respondents, while the research population was all MSMEs in Padang City. The sampling technique used was purposive sampling, considering the respondents' relevance to the research objectives, resulting in more representative data (Hair et al., 2021). Data was analyzed using Partial Least Squares Structural Equation Modeling (PLS-SEM) with SmartPLS software. This method was chosen because it is suitable for complex models with multiple constructs and can estimate multiple relationships between observed and latent variables (Hair et al., 2021; Scaliza, 2022). Model evaluation is carried out in two stages: (1) testing the measurement model (outer model) to assess the validity and reliability of the instrument through content validity, convergent validity, average variance extracted (AVE), discriminant validity, and composite reliability tests (Hair et al., 2021); and (2) testing the structural model (inner model) to assess the predictive power of the model through the R^2 , Q^2 values, and the significance of the structural path. This research was conducted over six months, with the survey conducted in 2024–2025.

IV. RESULTS AND DISCUSSION

Respondent profiles in this study aim to provide an overview or description of the respondents being studied. Researchers obtained an overview of the respondents' profiles and other data by distributing 200 questionnaires.

Table 1. Respondent Characteristics

No	Respondent Characteristics	Information	Number of Respondents	Percentage (%)
1	Gender	Man	85	42.5%
		Woman	115	57.5%
		Amount	200	100%
2	Age of Business Owner	< 20 years	12	6%
		21 – 30 years old	55	27.5%
		31 – 40 years old	66	33%
		41 – 50 years old	41	20.5%
		> 50 years	26	13%
		Amount	200	100%
3	Age of MSMEs	< 5 years	104	52%
		6 – 10 years	55	27.5%
		11 - 15 years	19	9.5%
		16 – 20 years	11	5.5%
		> 20 years	11	5.5%
		Amount	200	100%
4	Type of business	Food	104	52%
		Drink	30	15%
		Fashion	26	13%
		Automotive	24	12%
		Agribusiness	7	3.5%
		Beauty	9	4.5%
		Amount	200	100%

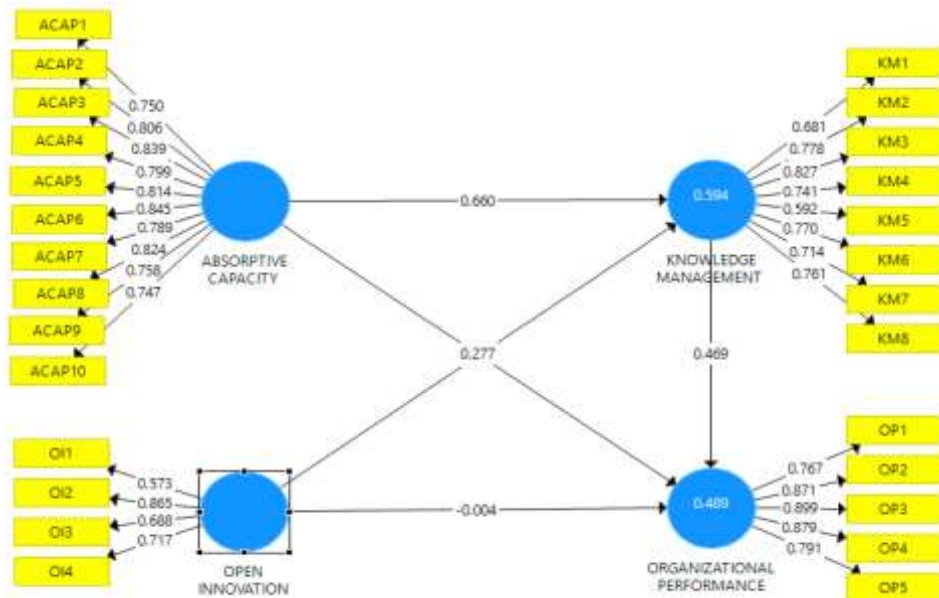
Source: Processed primary data, 2025

Based on respondents' characteristics, most MSMEs in Padang City are women (57.5%), while men account for 42.5%. In terms of the age of business owners, the largest number of respondents is in the 21–30 year range (27.5%), while the smallest number comes from the <20 year age group (6%). When viewed from the age of MSMEs, most businesses are still relatively new, with an

The Role of Knowledge Management in Mediating the Relationship Between Absorptive Capacity and Open Innovation and Its Impact on Organizational Performance

operational age of <5 years (52%), while MSMEs operating for >20 years only amount to 5.5%. Furthermore, the most dominant type of business is food (52%), followed by beverages (15%) and fashion (12%), while the business category with the smallest number is beauty (4.5%). This finding illustrates that respondents in the study are dominated by small-scale MSMEs with the characteristics of new businesses, culinary-based, and managed by young women.

Next, validity and reliability tests were conducted. Convergent validity can be seen from the correlation between item/indicator scores and construct scores. Individual indicators are considered valid if the correlation value is greater than or equal to 0.50 (Hair et al., 2021).



Source: Processed primary data, 2025
Figure 2. PLS Algorithm Analysis Results

Table 2. Convergent Validity test results

Variables	Statement Items	Outer Loading
Absorptive Capacity	10	0.750 to 0.845
Open Innovation	4	0.573 to 0.865
Knowledge Management	8	0.592 to 0.827
Organizational Performance	5	0.767 to 0.899

Source: Processed primary data, 2025

Table 2 above shows the results of the outer loading measurements for each research variable. The Absorptive Capacity variable is measured using 10 statement items with outer loading values ranging from 0.750 to 0.845, indicating that all indicators are strong enough to reflect this construct. The Open Innovation variable consists of 4 statement items with outer loading values ranging from 0.573 to 0.865.

Although there is an indicator with a relatively low value (0.573), most indicators still meet the criteria of >0.5 (Hair et al., 2021), So it can still be maintained in the model. Furthermore, the Knowledge Management variable measured by 8 statement items shows an outer loading value between 0.592 and 0.827, which generally describes adequate indicator validity. Meanwhile, the Organizational Performance variable consists of 5 statement items with a fairly high outer loading value, which ranges from 0.767 to 0.899, so it can be concluded that the indicators in this variable have excellent representation capabilities for the latent construct. Thus, all research variables met the requirements for convergent validity because most outer loading values are above the threshold of 0.5, and most of them approach or exceed 0.7, so they can be declared suitable for further structural model testing (Hair et al., 2021)

The Role of Knowledge Management in Mediating the Relationship Between Absorptive Capacity and Open Innovation and Its Impact on Organizational Performance

Table 3. Discriminant Validity Test Results Based on Cross-Loading

	Absorptive Capacity	Knowledge Management	Open Innovation	Organizational Performance
ACAP1	0.750	0.596	0.355	0.577
ACAP2	0.806	0.558	0.368	0.477
ACAP3	0.839	0.635	0.458	0.507
ACAP4	0.799	0.614	0.322	0.613
ACAP5	0.814	0.603	0.375	0.429
ACAP6	0.845	0.618	0.369	0.474
ACAP7	0.789	0.535	0.349	0.410
ACAP8	0.824	0.594	0.362	0.477
ACAP9	0.758	0.602	0.309	0.512
ACAP10	0.747	0.611	0.391	0.488
KM1	0.439	0.681	0.439	0.424
KM2	0.570	0.778	0.356	0.616
KM3	0.583	0.827	0.353	0.644
KM4	0.536	0.741	0.261	0.525
KM5	0.386	0.592	0.368	0.286
KM6	0.644	0.770	0.347	0.546
KM7	0.574	0.714	0.439	0.395
KM8	0.637	0.761	0.424	0.452
OI1	0.119	0.192	0.573	0.048
OI2	0.474	0.527	0.865	0.423
OI3	0.203	0.231	0.688	0.100
OI4	0.334	0.311	0.717	0.226
OP1	0.458	0.483	0.329	0.767
OP2	0.589	0.604	0.312	0.871
OP3	0.549	0.620	0.331	0.899
OP4	0.575	0.605	0.278	0.879
OP5	0.458	0.519	0.266	0.791

Source: Processed primary data, 2025

Description: Absorptive Capacity (ACAP); Open Innovation (OI); Knowledge Management (KM); Organizational Performance (OP). Another method to assess discriminant validity is to compare the square root of the Average Variance Extracted (AVE) value of each construct with the correlation between one construct and another construct in the model.

Table 4. Discriminant Validity Test Results Using the Square Root of AVE Seen in the Fornell-Larcker Criterion Test Results

	Absorptive Capacity	Knowledge Management	Open Innovation	Organizational Performance
Absorptive Capacity	0.798			
Knowledge Management	0.750	0.736		
Open Innovation	0.459	0.500	0.718	
Organizational Performance	0.627	0.675	0.358	0.843

Source: Processed primary data, 2025

The test results explain that the AVE value for the research variables is above 0.50. Furthermore, if viewed from the square root value of AVE for each construct consisting of the root of AVE, Absorptive Capacity, Knowledge Management, Open Innovation,

The Role of Knowledge Management in Mediating the Relationship Between Absorptive Capacity and Open Innovation and Its Impact on Organizational Performance

and Organizational Performance, the value obtained is greater than the correlation value between the constructs with other constructs in the model, so that the results have good discriminant validity (Ghozali, 2016).

The results of research data processing for construct reliability were measured using composite reliability and Cronbach's alpha.

Table 5. Composite Reliability and Cronbach's Alpha

	Cronbach's Alpha	Rho_A	Composite Reliability	Average Extracted (AVE)	Variance
Absorptive Capacity	0.936	0.937	0.946	0.637	
Knowledge Management	0.878	0.888	0.904	0.542	
Open Innovation	0.723	0.882	0.807	0.516	
Organizational Performance	0.897	0.906	0.925	0.711	

Source: Processed primary data, 2025

The results of the reliability and validity tests indicate that all research variables have met the established criteria. The Cronbach's Alpha and Composite Reliability values for all variables are above 0.7, indicating good internal consistency. In addition, the AVE value is also above 0.5, so convergent validity is met (Hair et al., 2014). The Organizational Performance variable has the highest reliability (CR = 0.925; AVE = 0.711), while Open Innovation shows the lowest reliability but remains within acceptable limits (CR = 0.807; AVE = 0.516). Thus, this research instrument is declared valid and reliable for further analysis. Overall, all research variables meet the criteria for reliability and convergent validity. This indicates that the instrument used in the study is suitable for measuring the constructs studied, and can proceed to the structural model analysis stage using PLS-SEM (Ghozali, 2016; Hair et al., 2021).

The structural model in PLS is evaluated using R² for the dependent variable and the path coefficient value for the independent variable, which is then assessed for significance based on the t-statistic value of each path.

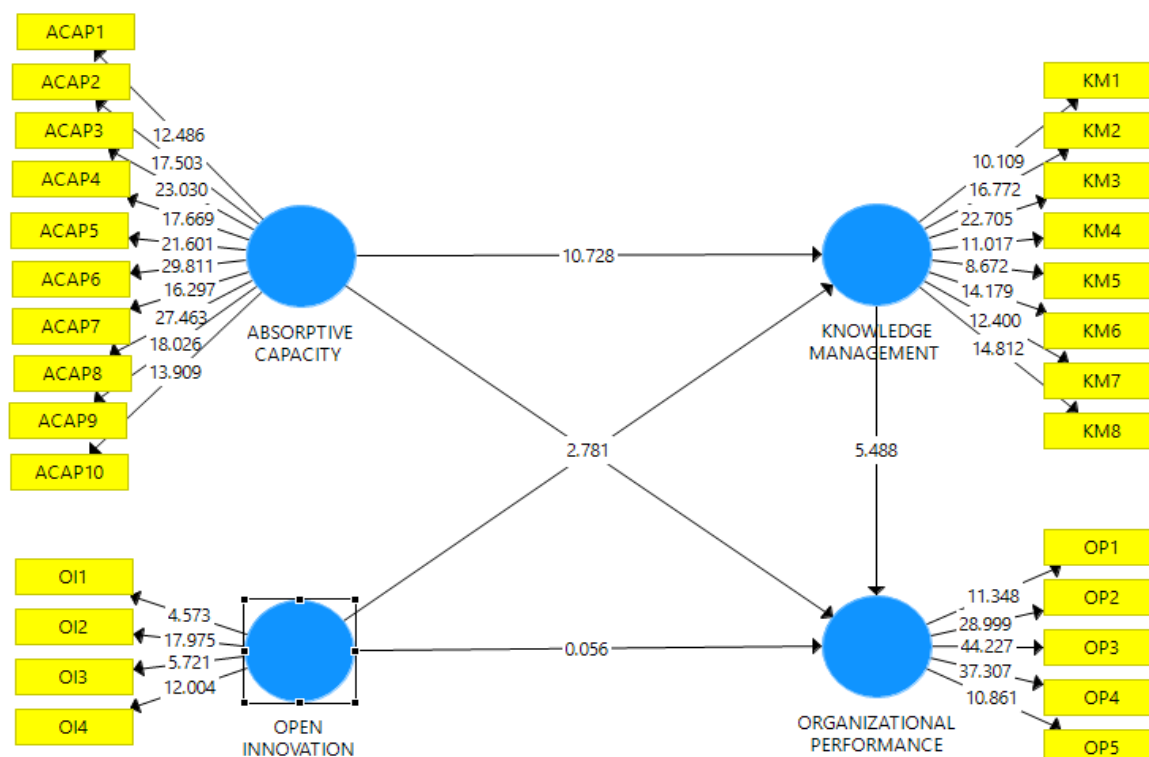


Figure 3. PLS Bootstrapping Results Display

Source: Processed primary data, 2025

To assess the significance of the prediction model in testing the structural model, it can be seen from the T-statistic value between the independent variable and the dependent variable in the Path Coefficient table in the SmartPLS output below:

The Role of Knowledge Management in Mediating the Relationship Between Absorptive Capacity and Open Innovation and Its Impact on Organizational Performance

Table 6. Path Coefficients Results (Mean, STDEV, t-Value)

		Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (O/STDEV)	P Values	Information
Absorptive Management	Capacity→Knowledge	0.660	0.652	0.061	10,728	0.000	Accepted
Absorptive Performance	Capacity→Organizational	0.277	0.271	0.100	2,781	0.006	Accepted
Knowledge Management	→Organizational Performance	0.469	0.469	0.085	5,488	0.000	Accepted
Open Management	Innovation→Knowledge	0.198	0.202	0.058	3,423	0.001	Accepted
Open Performance	Innovation→Organizational	-0.004	0.002	0.069	0.056	0.955	Rejected

Source: Processed primary data, 2025

Based on the results of the PLS-SEM analysis, it was found that absorptive capacity has a positive and significant effect on knowledge management with a path coefficient value of 0.660, t-statistic of 10.728, and p-value of 0.000. These results indicate that the higher the ability of MSMEs to absorb external knowledge, the better the organization's knowledge management. Thus, the first hypothesis is accepted (H1 is accepted). Furthermore, absorptive capacity has also been proven to have a positive and significant effect on organizational performance, with a path coefficient of 0.277, t-statistics of 2.781, and a p-value of 0.006. This indicates that good absorptive capacity can encourage increased organizational performance, so the second hypothesis is accepted (H2 is accepted).

In addition, the test results show that knowledge management has a positive and significant effect on organizational performance, with a path coefficient of 0.469, a t-statistic of 5.488, and a p-value of 0.000. This finding confirms that effective knowledge management plays an important role in improving the performance of MSMEs. Therefore, the third hypothesis is accepted (H3 is accepted). The effect of open innovation on knowledge management is also proven to be positive and significant, with a path coefficient of 0.198, a t-statistic of 3.423, and a p-value of 0.001. Open innovation practices carried out by MSMEs can encourage improvements in the knowledge management process. Thus, the fourth hypothesis is accepted (H4 is accepted). However, different results were found on the effect of open innovation on organizational performance, which showed a negative path coefficient of -0.004, a t-statistic of 0.056, and a p-value of 0.955. This means that open innovation does not significantly affect organizational performance in MSMEs in Padang City. Thus, the fifth hypothesis is rejected (H5 is rejected).

Table 7. Results Mean, STDEV, T-values, P-values

		Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (O/STDEV)	P Values	Information
Absorptive Management→ Performance	Capacity→Knowledge Organizational	0.309	0.307	0.068	4,536	0.000	Accepted
Open Management→ Performance	Innovation→Knowledge Organizational	0.093	0.095	0.033	2,791	0.006	Accepted

Source: Processed primary data, 2025

Based on the results of the indirect effect test using the PLS-SEM approach, it was found that knowledge management acts as a significant mediator in the relationship between absorptive capacity and organizational performance. The path coefficient value of 0.309 with a t-statistic of 4.536 and a p-value of 0.000 indicates that the higher the absorptive capacity of MSMEs, the greater the impact on improving organizational performance if managed through knowledge management practices. Thus, this mediation

The Role of Knowledge Management in Mediating the Relationship Between Absorptive Capacity and Open Innovation and Its Impact on Organizational Performance

hypothesis is declared accepted (H6 is accepted). Furthermore, the indirect effect of open innovation on organizational performance through knowledge management has also been significant. The path coefficient of 0.093 with a t-statistic of 2.791 and a p-value of 0.006 indicates that open innovation can contribute to organizational performance when integrated with the knowledge management process (H7 is accepted). These results confirm that knowledge management is a key variable that strengthens the relationship between absorptive capacity and open innovation with organizational performance in MSMEs in Padang City.

The research results on Hypothesis 1 and Hypothesis 2 indicate that absorptive capacity positively and significantly affects knowledge management and organizational performance. This means that the greater the ability of MSMEs to recognize, absorb, and utilize external knowledge, the better the organization's performance. This finding supports the KBV perspective, which emphasizes that knowledge is a strategic resource that drives competitive advantage (Donate & Sánchez de Pablo, 2015; Grant, 1996). With good absorptive capacity, organizations can internalize new knowledge into managerial practices, thereby strengthening the effectiveness of knowledge management (Ramadhan et al., 2024) and improve performance (Putra & Hartono, 2024; Zahra & George, 2002).

Furthermore, Hypothesis 3 states that knowledge management has been proven to positively and significantly impact organizational performance. This means that knowledge management practices, including acquiring, storing, distributing, and applying knowledge, can increase the MSMEs' innovation, efficiency, and competitiveness. These results align with previous research that confirms that knowledge management plays a key role in strengthening an organization's adaptability to changes in the business environment (Darmawan et al., 2023; Liu et al., 2023; Sunaryudanto & Rofiaty, 2024). Thus, the success of MSMEs in improving performance is largely determined by the effectiveness of knowledge management.

The study's results on hypothesis 4 indicate that open innovation has a positive and significant effect on knowledge management. This indicates that the higher the openness of MSMEs in collaborating with external parties, such as customers, suppliers, and business partners, the better the knowledge management practices they can develop. Knowledge gained through open innovation mechanisms is important for enriching an organization's internal knowledge base. This finding aligns with research (Bogers et al., 2018; Lichtenthaler, 2011; Naseer, 2021), emphasizing that open innovation encourages organizations to integrate external knowledge into their knowledge management systems. Thus, open innovation catalyzes strengthening knowledge management, ultimately becoming the foundation for improving organizational performance.

In contrast, the results of the hypothesis 5 test indicate that open innovation does not have a direct, significant effect on organizational performance. This means that even though MSMEs have implemented an open innovation strategy, this has not immediately improved organizational performance. This may occur because the benefits of open innovation will only be realized when external knowledge is effectively managed through knowledge management. This finding is consistent with studies (Laursen & Salter, 2006; Scuotto et al., 2017). This shows that open innovation does not always directly impact performance, but rather requires the support of internal organizational capacity, such as absorptive capacity and solid knowledge management practices. Thus, the success of open innovation in improving organizational performance depends heavily on the organization's ability to absorb, internalize, and utilize knowledge acquired from outside sources.

Meanwhile, Hypotheses 6 and 7 indicate that open innovation indirectly affects organizational performance through knowledge management. The direct effect of open innovation on performance is insignificant, but becomes significant when mediated by knowledge management. This suggests that knowledge gained from open innovation practices significantly impacts performance when managed systematically within the knowledge management process. This finding reinforces previous studies that assert that open innovation must be combined with internal knowledge management capabilities to generate added value for an organization (Chesbrough et al, 2014; Santoro et al., 2018). Thus, the results of this study confirm that knowledge management is a key enabler linking absorptive capacity and open innovation with organizational performance. From a KBV perspective, MSMEs that can manage knowledge well will more easily transform knowledge resources into sustainable competitive advantages (Grant, 1996; Iqbal et al., 2023).

V. CONCLUSIONS

This study aims to analyze the influence of absorptive capacity, open innovation, and knowledge management on organizational performance in MSMEs in Padang City. The results show several important findings. First, absorptive capacity has a positive and significant effect on knowledge management and organizational performance, which means that the ability of MSMEs to absorb, internalize, and utilize external knowledge is a key factor in improving organizational performance. Second, knowledge management is proven to have a positive and significant effect on organizational performance, so that good knowledge management can be a key driver for MSMEs to increase competitiveness and business sustainability. Third, open innovation has

The Role of Knowledge Management in Mediating the Relationship Between Absorptive Capacity and Open Innovation and Its Impact on Organizational Performance

a positive and significant effect on knowledge management, but does not directly affect organizational performance. This indicates that openness to innovation will positively impact organizational performance if managed effectively through knowledge management practices. Thus, this study confirms the role of knowledge management as an important mediating mechanism linking open innovation and organizational performance.

Based on the research results, several recommendations can be put forward. First, MSMEs in Padang City need to strengthen their absorptive capacity by improving skills, expanding external networks, and strengthening organizational learning mechanisms, so that external knowledge can be effectively adapted. Second, MSMEs need to optimize knowledge management practices, such as knowledge documentation, ongoing training, and information technology, so that the results of open innovation can be maximized to improve performance. Third, although open innovation does not directly improve organizational performance, MSMEs still need to build strategic partnerships with suppliers, customers, and educational institutions, because this collaboration can be a source of new, useful ideas if managed well. Fourth, it is recommended that local governments and policymakers provide support through knowledge management training, access to digital technology, and innovation mentoring so that MSMEs can compete in an increasingly dynamic business environment.

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