

The Impact of the Knowledge Management Dimension on the Performance of MSMEs

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Abstract

This article discusses the importance of Knowledge Management Dimension on the Performance of MSMEs. The data used in this study are primary data through interviews and a list of questions with a questionnaire. Analysis of the data in this study using a structural equation model with the analytical tool used is using AMOS. The results showed that the coefficient of determination of Knowledge management influence could explain by the Knowledge Sharing, Knowledge Creation and Knowledge Implementing about 88,6%. The coefficient of determination for the magnitude of Organizational performance influence, which can be explained by the organization's variable dimensions of organizational culture, organizational structure, training, and knowledge sha Knowledge Sharing, Knowledge Creation, Knowledge Implementing and Knowledge management aboout 6,9%. From testing the hypothesis that Knowledge Sharing, Knowledge Creation and Knowledge Implementing positively and significantly affects Knowledge management. But on testing the hypothesis that Knowledge Sharing, Knowledge Implementing and Knowledge management also positively and significantly affects Organizational performance, While knowledge creation negatively and not significantly affects Organizational performance.

Key words: Knowledge Management, MSMEs, Organizational performance, Structural Equation Model (SEM).

INTRODUCTION

In the current era of globalization development, Micro, Small and Medium Enterprises (MSMEs) are one of the pillars of Indonesia's economic development. According to Buntoro et al., (2023) the existence of Micro, Small and Medium Enterprises (MSMEs) is one of the main pillars in the national economy because they can develop and be consistent

to improve welfare. Because MSMEs have goals that are interrelated with each other in order to improve their abilities. The increase in MSME growth is very helpful for the country's economic growth (Wierzbński et al., 2023; Zsigmond & Mura, 2023). This is because MSMEs are one of the determining factors for economic success.

Regional development is directed to the development of economic activities that can provide welfare to the community. One of them is by improving the performance of MSMEs so that they are resistant to crises and a less supportive economy (Riadi et al., 2023). The development of MSMEs brings increasingly fierce competition, as a result of which MSMEs that are unable to compete will be displaced from business competition. The efforts that can be made to make MSMEs more competitive, independent, and contribute to the regional economy are through increasing the knowledge of MSME owners through various ways and policies taken by the local government (Hadi & Marpaung, 2023; Siddiqui et al., 2024). There are many obstacles that must be faced by MSMEs today, including a lack of business capital, lack of access to technology that is not proportional to technological developments. In addition, MSMEs have limitations in product marketing, lack of quality human resources. Moreover, the management of MSME management which is still traditional has not yet reached the modern direction (Mauludin et al., 2023).

Knowledge management of management or often referred to as knowledge management, is a strategy directed to organization owners about knowledge in the management of an organization so that it is expected to improve the performance of MSMEs that have competence and competitiveness. Organizational performance is one of the benchmarks regarding how a business achieves each of its goals (Kanaan et al., 2024). According to Han et al., (2024) In the process of achieving performance as an illustration of business success, knowledge is a crucial organizational resource and knowledge managed effectively by the organization in knowledge management provides a guarantee of sustainable competitive advantage for an organization. The knowledge possessed by employees can affect their abilities, when knowledge increases, an individual's ability can indirectly increase so that their performance will also be affected.

Knowledge Management is the management of functions that create or place knowledge, manage the flow of knowledge, and ensure knowledge is used effectively and efficiently for the long-term benefit of the organization (Alharbi & Aloud, 2024). The increase in MSME growth is very helpful for the country's economic growth. MSMEs that are unable to compete will be displaced from business competition. The efforts that can be made to make MSMEs more competitive, independent, and contribute to the regional economy are through increasing the knowledge of MSME owners through various ways and policies taken by the local government (Durst et al., 2024). Knowledge management is seen as important

for creative MSME activities in terms of encouraging the actualization of business unit innovation as a whole. The actualization of creative MSME innovations requires the efficient use of knowledge or knowledge management. In addition, technological acceleration supported by artificial intelligence is considered to be able to encourage competitive competitiveness to improve welfare (Sima et al., 2022).

LITERATURE ANALYSIS

According to Abuaddous & Abualodous (2022), organizational performance is something that has been achieved by the organization in a certain amount of time, both related to inputs, outputs, outcomes, benefits, and impacts. The performance dimension in an organization is a quantitative and qualitative measure that describes the level of achievement of goals or objectives that have been set. Organizational performance indicators are measured based on several measures, namely: (1) the financial perspective or this financial perspective is related to the company's income and expenses because the company must be able to manage finances well so that its finances continue to be stable. (2) Customer perspective is related to the ability to manage consumers as product users so as to create loyal consumers. (3) Internal business perspective related to the business strategy owned by the manager to improve and develop the business. (4) innovation and learning perspective related to innovation and renewal of products and learning activities both formal and non-formal.

Knowledge management involves all activities related to the acquisition, use, and sharing of knowledge by an organization. Evidence shows that this practice is increasingly being used and its impact on innovation and other aspects of company performance should not be ignored (Mauli & Simorangkir, 2015). Currently, it is important to understand and measure knowledge management activities so that organizations can be more efficient and governments can develop policies to promote these benefits. Knowledge management is an effort to increase useful knowledge in an organization, including familiarizing the culture of communication between individuals, providing opportunities for learning, and encouraging knowledge sharing (Daud et al., 2010; Valencia-Arias et al., 2024). Knowledge management is a system that allows companies to absorb the knowledge, experience, and creativity of their staff to improve company performance. According to Cerchione et al. (2015) Knowledge management is the ability of a company to manage knowledge from its environment and incorporate that knowledge into business processes. Knowledge management also aims to assemble a process that has been developed within an organization to create, collect, maintain, and disseminate or disseminate all types of knowledge information into the organization (Sunyoto et al., 2023). Broadly speaking, the

function of knowledge management is to require employees to work well, have adequate talents and skills, and have in-depth knowledge of the company's internal and external knowledge (Riadi et al., 2023)

The dimensions of knowledge management needed for MSMEs include:

1. Knowledge Implementing

Information and knowledge have profoundly transformed businesses, organizations, and society. Knowledge implementing promises concepts and instruments that help organizations to provide an environment that supports knowledge creation, sharing, and application. The concept that has influenced it integrates it into a framework consisting of strategy, organization, systems and economics to create an inspiring design (Valencia-Arias et al., 2024).

2. Knowledge Creation

Knowledge to manage dynamic aspects of an organization's knowledge creation process. Its main activity is that organizational knowledge is created through continuous dialogue between explicit knowledge. It is said that while new knowledge is developed by individuals, organizations must put an important role in articulating and reinforcing that knowledge. A theoretical framework is developed that provides an analytical perspective on the constituent dimensions of knowledge creation (Alharbi & Aloud, 2024).

3. Knowledge Sharing

Presenting a motivational model of knowledge sharing based on a combination of planned behavior theory and self-determination theory, along with one that supports the model and suggestions for the future (Zsigmond & Mura, 2023). MSMEs are required to have knowledge sharing to learn organizational behavior. As well as designing the importance of human resource (HR) management, including staff, job design, performance, managerial style, and training. (Sima et al., 2022)

METHODOLOGY

This study uses the method used in this study using the explanatory research method which is used to find out how much the relationship between variables, indicators that reduce the size of knowledge management variables consist of knowledge implementing, knowledge creating, knowledge sharing, and the dependent variable is the improvement of MSME performance. The research design in this study is quantitative and descriptive. The population carried out in this study is MSME business actors in Sungai Penuh District. The questionnaire was distributed using a google form to MSME owners. The questionnaire that was successfully returned was 125 respondents. For data analysis using AMOS software.

3) Parsimony Fit Indices

The results of PNFI = 0.638 and PCFI = 0.673 which are interpreted as "accepted" because they are in the criteria of a value ranging from 0 -1

Based on the explanation of the results of the model test above, it is produced that the model in this study can be accepted.

Hypothesis Testing

Hypothesis testing in this study uses a comparison of the results of the Critika Ratio and P. With the criterion of the value of the Critical Ratio > 1.96 or the P value is below 0.05. The results of hypothesis testing can be seen in table 1 below:

Table 1. Hypothesis Testing

			Estimate	S.E.	C.R.	P
Knowledge_management	<---	Knowledge_Implementing	1.063	.122	8.717	***
Knowledge_management	<---	Knowledge_Creation	1.490	.146	10.194	***
Knowledge_management	<---	Knowledge_Sharing	.263	.149	1.989	.037
Organizational_performance	<---	Knowledge_management	1.104	.095	11.602	***
Organizational_performance	<---	Knowledge_Implementing	1.938	.229	8.450	***
Organizational_performance	<---	Knowledge_Creation	-.130	.265	-.492	.623
Organizational_performance	<---	Knowledge_Sharing	2.091	.255	8.212	***

From the table above, the results of the Hypothesis test are: From the table above, the results of the Hypothesis test are:

- 1) The hypothesis test between Knowledge Implementing on Knowledge management is with the result of CR = 8.717 and P = 0. With the conclusion that Knowledge Implementing has a positive effect on Knowledge management is acceptable. Because it meets the criteria where CR > 1.96 and P < 0.05.
- 2) The hypothesis test between Knowledge creation on Knowledge management is with the result of CR = 10.194 and P = 0. With the conclusion that Knowledge Creation has a positive effect on Knowledge management can be accepted. Because it meets the criteria where CR > 1.96 and P < 0.
- 3) The hypothesis between Knowledge Sharing on Knowledge Management is that the result is CR = 1.989 and P = 0.037. With the conclusion that Knowledge Sharing has a positive effect on Knowledge_management is acceptable. Because it meets the criteria where CR > 1.96 and P < 0.05

- 4) The hypothesis test between Knowledge management on Organizational performance is with the result of $CR = 11.602$ and $P = 0$. With the conclusion that Knowledge management has a positive effect on Organizational performance can be accepted. Because it meets the criteria where $CR > 1.96$ and $P < 0.05$
- 5) The hypothesis test between Knowledge Implementing on Organizational performance is with the result of $CR = 8,450$ and $P = 0$. With the conclusion that Knowledge Implementing has a positive effect on organizational performance can be accepted. Because it meets the criteria where $CR > 1.96$ and $P < 0.05$
- 6) The hypothesis test between Knowledge Creation on Organizational performance is with the result of $CR = -0.492$ and $P = 0.623$. With the conclusion that Knowledge Creation has a negative effect on organizational performance is unacceptable. Because it does not meet the criteria where $CR < 1.96$ and $P > 0.05$.
- 7) The hypothesis test between Knowledge Sharing on Organizational performance is with the result of $CR = 8,212$ and $P = 0$. With the conclusion that Knowledge Sharing has a positive effect on organizational performance can be accepted. Because it meets the criteria where $CR > 1.96$ and $P < 0.05$.

Analysis of Direct Effect, Indirect Effect and Total Effect

Direct Effect, Indirect Effect and Total Effect analysis are used to see how the influence between each construct is achieved. Direct effect is an influence using a single-ended arrow. Indirect effect is an influence that arises due to the impact of variable influences, including. Total effect is the influence and effect of various relationships in the research model.

Table 2. Total Effect

	Knowledge Sharing	Knowledge Creation	Knowledge Implementing	Knowledge management	Organizational performance
Knowledge management	.300	-.734	1.464	.000	.000
Organizational performance	.014	.239	-.063	-.552	.000

Table 3. Direct Effect

	Knowledge Sharing	Knowledge Creation	Knowledge Implementing	Knowledge management	Organizational performance
Knowledge management	.300	-.734	1.464	.000	.000

	Knowledge Sharing	Knowledge Creation	Knowledge Implementing	Knowledge management	Organizational performance
Organizational performance	.179	-.167	.746	-.552	.000

Table 4. Indirect Effect

	Knowledge Sharing	Knowledge Creation	Knowledge Implementing	Knowledge management	Organizational performance
Knowledge management	.000	.000	.000	.000	.000
Organizational performance	-.166	.406	-.809	.000	.000

From the results of Tables 2, 3 and 4, conclusions are drawn from each Effect into a matrix:

Tabel 5 Matrix of Coefficients of Total Effect Path, Direct Effect and Indirect Effect

Description	Direct Effect	Indirect Effect	Total Effect
The Effect of Knowledge Sharing on Organizational Performance	0,179	-0,166	0,014
The Effect of Knowledge Creation on Organizational performance	-0,167	0,406	0,239
The Effect of Knowledge Implementing on Organizational performance	0,746	-0,809	-0,063
The Effect of Knowledge Sharing on Knowledge management	0,300	-	0,300
The Effect of Knowledge Creation on Knowledge management	-0,734	-	-0,734
The Effect of Knowledge Implementing on Knowledge management	1,464	-	1,464
The Effect of Knowledge management on Organizational performance	-0,552		-0,552

From the Matrix of Total Influence Path Coefficients, Direct Influence and Indirect Influence above, the results are obtained:

- 1) The direct effect between Knowledge Sharing on Organizational Performance is 0.179. The indirect effect of Knowledge Sharing through Knowledge management on

Organizational Performance was -0.166. This is interpreted as Direct effect > Indirect effect ($0.179 > -0.166$). So it can be interpreted in this study that Knowledge management is a variable that cannot mediate Knowledge Sharing to the Organizational Performance of MSMEs.

- 2) The direct effect between Knowledge Creation on Organizational Performance is -0,167. The indirect effect of Knowledge Creation through Knowledge management on Organizational Performance was 0,406. This is interpreted as Direct effect < Indirect effect ($-0,167 < 0,406$). So it can be interpreted in this study that Knowledge management is a variable that can mediate Knowledge Creation to the Organizational Performance of MSMEs.
- 3) The direct effect between Knowledge Implementing on Organizational Performance is 0,746. The indirect effect of Knowledge Implementing through Knowledge management on Organizational Performance was -0,809. This is interpreted as Direct effect > Indirect effect ($0,746 > -0,809$). So it can be interpreted in this study that Knowledge management is a variable that cannot mediate Knowledge Implementing to the Organizational Performance of MSMEs.

Squared Multiple Correlations

To see the magnitude of the influence of each variable on exogenous variables, it can be seen in the table 6 below below :

Tabel 6. Squared Multiple Correlations

		Estimate
Knowledge_management		.886
Organizational_performance		.069

The Knowledge management estimate is 0,886, which means Knowledge management variability which can be explained by the Knowledge Sharing, Knowledge Creation and Knowledge Implementing 88,6%. While the coefficient of determination of the Organizational performance equation is 0,069 or the Organizational performance variable which can be explained by the variability of Knowledge Sharing, Knowledge Creation, Knowledge Implementing and Knowledge management by 6,9%.

CONCLUSION

The results showed that the coefficient of determination of Knowledge management influence could explain by the Knowledge Sharing, Knowledge Creation and Knowledge Implementing about 88,6%. The coefficient of determination for the magnitude of Organizational performance influence, which can be explained by the organization's variable dimensions of organizational culture, organizational structure, training, and knowledge sha Knowledge Sharing, Knowledge Creation, Knowledge Implementing and Knowledge management about 6,9%. From testing the hypothesis that Knowledge Sharing, Knowledge Creation and Knowledge Implementing positively and significantly affects Knowledge management. But on testing the hypothesis that Knowledge Sharing, Knowledge Implementing and Knowledge management also positively and significantly affects Organizational performance, While knowledge creation negatively and not significantly affects Organizational performance.

REFERENCES

- Alharbi, G. L., & Aloud, M. E. (2024). The effects of knowledge management processes on service sector performance: evidence from Saudi Arabia. *Humanities and Social Sciences Communications*, 11(1). <https://doi.org/10.1057/s41599-024-02876-y>
- Buntoro, G. A., Astuti, I. P., Widhianingrum, W., Arifin, R., Winangun, K., & Selamat, A. (2023). Knowledge Management System for Handcrafted Reog Ponorogo Products. *Electronic Journal of Knowledge Management*, 21(2), 130–139. <https://doi.org/10.34190/EJKM.21.2.3026>
- Cerchione, R., Esposito, E., & Spadaro, M. R. (2015). The spread of knowledge management in SMEs: A scenario in evolution. *Sustainability (Switzerland)*, 7(8), 10210–10232. <https://doi.org/10.3390/su70810210>
- Daud, S., Fadzilah, W., & Yusoff, W. (2010). SMEs : The Role Of Social Capital As A Mediating. *Academy of Management Journal*, 15(2), 135–155.
- Durst, S., Foli, S., & Edvardsson, I. R. (2024). A systematic literature review on knowledge management in SMEs: current trends and future directions. *Management Review Quarterly*, 74(1), 263–288. <https://doi.org/10.1007/s11301-022-00299-0>
- Elizar, Suripin, & Wibowo, M. A. (2017). Model of Construction Waste Management Using AMOS-SEM for Indonesian Infrastructure Projects. *MATEC Web of Conferences*, 138. <https://doi.org/10.1051/mateconf/201713805005>
- Hadi, T., & Marpaung, A. B. (2023). Transformational Leadership & Knowledge Management Impact on Organization Performance: A Systematic Review. *APTISI Transactions on Technopreneurship*, 5(1), 64–72. <https://doi.org/10.34306/att.v5i1.292>

- Han, Y., Zhou, Y., Carr, S., & Jiang, J. (2024). Lifelong learning in the workplace: the knowledge management role of corporate universities in China. *Humanities and Social Sciences Communications*, 11(1), 1–11. <https://doi.org/10.1057/s41599-024-02693-3>
- Kanaan, O. A., Alsoud, M., Asad, M., Ta’amnha, M. A., & Al-Qudah, S. (2024). A mediated moderated analysis of knowledge management and stakeholder relationships between open innovation and performance of entrepreneurial firms. *Uncertain Supply Chain Management*, 12(4), 2383–2398. <https://doi.org/10.5267/j.uscm.2024.5.028>
- Mauli, R. T., & Simorangkir, C. (2015). a Knowledge Management Approach for Small Medium Enterprises (Sme). *Jurnal Ilmiah Manajemen Dan Bisnis*, 1(1), 58.
- Mauludin, M. F., Sudarmiatin, Mukhlis, I., & Handayati, P. (2023). The role of competitive advantage as a mediator of knowledge management, learning orientation and innovation on the performance of batik SMEs in Bangkalan regency, Indonesia. *International Journal of Applied Economics, Finance and Accounting*, 17(2), 415–428. <https://doi.org/10.33094/ijaefa.v17i2.1188>
- Riadi, S. S., Hapsari, P., Budiman, P. W., Anwar, K., & Yudaruddin, R. (2023). The impact of knowledge management on SMEs’ performance during the COVID-19 pandemic: Assessing the significance of digital variables. *Knowledge and Performance Management*, 7(1), 76–90. [https://doi.org/10.21511/kpm.07\(1\).2023.06](https://doi.org/10.21511/kpm.07(1).2023.06)
- Siddiqui, F., Yusheng, K., Ravina-Ripoll, R., & Aden, A. S. (2024). Dynamic firm performance: Entrepreneurship, knowledge, social media, customer relationship management, environment. *South African Journal of Business Management*, 55(1), 1–13. <https://doi.org/10.4102/sajbm.v55i1.4346>
- Sima, X., Coudert, T., Geneste, L., & de Valroger, A. (2022). Knowledge management in SMEs: preliminary ideas for a dedicated framework. *IFAC-PapersOnLine*, 55(10), 1050–1055. <https://doi.org/10.1016/j.ifacol.2022.09.528>
- Sunyoto, Pratikto, H., Sudarmiatin, & Sopiah. (2023). Innovation ability in mediates on the relationship of entrepreneurship orientation, organizational culture and knowledge management on MSME performance. *International Journal of Applied Economics, Finance and Accounting*, 16(2), 355–366. <https://doi.org/10.33094/ijaefa.v16i2.1001>
- Valencia-Arias, A., Patiño-Toro, O. N., Coronado, M. H. V., Bernal, O. V., & Marquina, E. Z. (2024). Knowledge Management in Small and Medium Enterprises: Literature Review and Research Agenda. *Scientific Papers of the University of Pardubice, Series D: Faculty of Economics and Administration*, 32(1), 1656. <https://doi.org/10.46585/sp32011656>



Wierzbiński, B., Zaborek, P., Wosiek, M., & Surmacz, T. (2023). Knowledge management orientation as a driver of competitive performance: Evidence from Polish SMEs in the aviation industry. *Entrepreneurial Business and Economic Review*, 11(1), 93–112. <https://doi.org/10.15678/EBER.2023.110105>

Zsigmond, T., & Mura, L. (2023). Emotional Intelligence and Knowledge Sharing As Key Factors in Business Management – Evidence From Slovak Smes. *Economics and Sociology*, 16(2), 248–264. <https://doi.org/10.14254/2071-789X.2023/16-2/15>

