1st International Conference on Multidisciplinary Engagement

Knowledge Sharing and Entrepreneurial Leadership in Enhancing Employee Performance: The Mediating Role of Innovative Work Behavior

Aprinawati[1*], Ritha F. Dalimunthe[2], Yeni Absah[3], Elisabet Siahaan[4]
[1,2,3,4]*Universitas Sumatera Utara, Jl. Dr. T. Mansyur No. 9, Medan, 20155, Indonesia*

Corresponding Author.
**Email*: aprinawati@students.usu.ac.id

Abstract: *This study aims to examine the effect of knowledge sharing and entrepreneurial leadership on employee performance, with innovative work behaviour acting as a mediating variable. In the current competitive organisational environment, improving employee performance is essential and can be influenced by leadership style, knowledge exchange among employees, and employees' ability to generate and implement innovative ideas. Therefore, this study investigates how knowledge sharing and entrepreneurial leadership contribute to employee performance both directly and indirectly through innovative work behaviour. This research uses a quantitative, survey-based approach. Data were collected from* ***69 respondents*** *and analysed using Structural Equation Modelling (SEM) with the Partial Least Squares (PLS) approach. The analysis was conducted to evaluate the relationships among knowledge sharing, entrepreneurial leadership, innovative work behaviour, and employee performance. The results show that knowledge sharing and entrepreneurial leadership have a positive and significant effect on employee performance. Furthermore, both knowledge sharing and entrepreneurial leadership significantly influence innovative work behaviour. Innovative work behaviour also has a positive and significant effect on employee performance. The mediation analysis reveals that innovative work behaviour significantly mediates the relationship between entrepreneurial leadership and employee performance. However, innovative work behaviour does not significantly mediate the relationship between knowledge sharing and employee performance. In conclusion, entrepreneurial leadership and knowledge sharing are important factors in improving employee performance. Organisations are encouraged to strengthen knowledge-sharing practices and promote entrepreneurial leadership to stimulate innovative work behaviour and enhance employee performance.*

Keywords: *Employee Performance, Entrepreneurial Leadership, Innovative Work Behavior, Knowledge Sharing, SMEs*

1. INTRODUCTION

Small and medium-sized enterprises (SMEs) play an important role in supporting economic growth and employment in many developing countries, including Indonesia [1], [2], [3], [4], [5]. SMEs contribute significantly to national income, local economic development, and community welfare [6], [7], [8], [9]. In addition, SMEs are often considered flexible and adaptive businesses that can survive economic uncertainty. In the creative industry sector, SMEs also contribute to preserving local culture while generating economic value [10], [11], [12].

One of the creative industries that has both cultural and economic significance in Indonesia is the batik industry. Batik SMEs not only produce traditional textile products but also represent cultural heritage and local identity [13], [14], [15]. In several regions of Indonesia, including North Sumatra, batik SMEs have experienced growth and development as part of the creative economy sector. However, in order to remain competitive in an increasingly dynamic market, these SMEs must continuously improve their organisational performance and employee productivity.

Employee performance is widely recognised as a critical factor that determines organisational success. High employee performance can improve productivity, product quality, and overall organisational competitiveness [16], [17]. In SMEs, where organisational structures are relatively small and resources are limited, employee performance becomes even more crucial because employees often perform multiple roles and responsibilities simultaneously. Therefore, understanding the factors that influence employee performance is important for both researchers and practitioners.

One of the organisational factors that can enhance employee performance is knowledge sharing. Knowledge sharing refers to the process through which individuals exchange knowledge, information, skills, and experiences with others within an organization [18], [19]. Through effective knowledge sharing, employees can learn from each other, solve problems more efficiently, and improve their work performance. Knowledge sharing also helps organizations utilize collective expertise to achieve better outcomes.

Previous studies have emphasised that knowledge sharing contributes to improved learning capability and organisational innovation. When employees actively share knowledge, organisations can develop new ideas, improve work processes, and respond more effectively to environmental changes. However, the success of knowledge sharing depends on whether employees are willing and motivated to exchange knowledge and whether the organisation provides a supportive environment for knowledge exchange.

In addition to knowledge sharing, leadership plays an essential role in shaping employee attitudes and behaviour in the workplace. Leadership influences how employees perceive organisational goals, responsibilities, and opportunities for development. Among various leadership styles, entrepreneurial leadership has gained increasing attention in recent years due to its emphasis on innovation, opportunity recognition, and proactive decision-making.

Entrepreneurial leadership refers to a leadership style that encourages employees to explore new opportunities, develop creative ideas, and take calculated risks to achieve organisational goals [20], [21]. Leaders who demonstrate entrepreneurial characteristics tend to inspire employees to be more proactive and innovative in their work. In SMEs, entrepreneurial leadership is particularly important because leaders often directly influence employees' motivation and organisational culture.

Another concept closely related to employee performance is innovative work behaviour. Innovative work behaviour refers to employees' ability to generate, promote, and implement new ideas that improve work methods, products, or services [22], [23]. Employees who engage in innovative work behaviour are more likely to contribute to organisational improvement and adaptability. Such behaviour is especially important in competitive environments where organisations must continuously innovate to remain relevant.

Innovative work behaviour may also serve as an important mechanism linking organisational practices and employee outcomes. When employees receive knowledge from their colleagues and support from their leaders, they are more likely to transform these resources into creative and innovative actions. In this context, innovative work behaviour may function as a mediating variable that explains how knowledge sharing and leadership influence employee performance.

Although previous studies have explored the relationships among knowledge sharing, leadership, innovation, and performance, empirical studies that integrate these variables within a single framework remain limited, particularly in the context of SMEs in developing regions. Furthermore, many studies focus on large organisations, while SMEs often have different organisational dynamics and resource constraints.

Therefore, this study aims to examine the influence of knowledge sharing and entrepreneurial leadership on employee performance with innovative work behaviour as a mediating variable. The research focuses on batik SMEs in North Sumatra, Indonesia. The novelty of this research lies in integrating knowledge sharing and entrepreneurial leadership in explaining employee performance through innovative work behaviour within the SME context. The findings are expected to provide theoretical contributions to organizational behavior research as well as practical insights for SME managers in fostering knowledge exchange, leadership support, and innovative behaviour among employees.

2. METHOD

This study employs a quantitative research approach to examine the relationships among knowledge sharing, entrepreneurial leadership, innovative work behaviour, and employee performance. A quantitative approach is appropriate for this study because it allows researchers to test theoretical relationships among variables using statistical analysis [24], [25], [26], [27], [28]. The study aims to empirically investigate how

organisational and behavioural factors influence employee performance within the context of small and medium-sized enterprises (SMEs).

The research design uses a survey method to collect primary data from employees working in batik SMEs located in North Sumatra, Indonesia. Data were collected using a structured questionnaire distributed to employees involved in operational and production activities. A total of 69 respondents participated in this study. The respondents were selected using a purposive sampling technique, considering employees who have sufficient experience and involvement in the organisational processes within the SMEs.

This study consists of four main variables. Knowledge sharing is treated as the first independent variable (X1), while entrepreneurial leadership is considered the second independent variable (X2). Innovative work behaviour is positioned as the mediating variable (M), and employee performance is the dependent variable (Y). These variables are examined to understand how knowledge exchange and leadership style influence employee performance directly and indirectly through innovative work behaviour.

Knowledge sharing refers to the process through which employees exchange information, knowledge, and experiences with colleagues in order to improve work processes and organisational learning. Entrepreneurial leadership represents a leadership style that encourages innovation, opportunity exploration, and proactive behaviour among employees. Innovative work behaviour refers to employees' ability to generate, promote, and implement new ideas in their work processes. Meanwhile, employee performance reflects employees' effectiveness and productivity in accomplishing their assigned tasks and responsibilities.

To analyse the relationships among the variables, this study applies Structural Equation Modelling (SEM) as the primary analytical technique. SEM is widely used in social science research because it enables researchers to test complex relationships among multiple variables simultaneously. The method allows for the examination of both direct and indirect effects between independent variables, mediating variables, and dependent variables within a single analytical framework.

The measurement model in this study is evaluated to assess the reliability and validity of the constructs. Reliability testing is conducted to ensure the internal consistency of the measurement indicators, while validity testing is performed to confirm that the indicators accurately measure the intended constructs. The evaluation of the measurement model includes tests such as convergent validity, discriminant validity, and composite reliability.

After confirming the adequacy of the measurement model, the structural model is assessed to examine the hypothesised relationships among the variables. The structural model analysis aims to determine the strength and significance of the causal relationships between knowledge sharing, entrepreneurial leadership, innovative work behaviour, and employee performance. This analysis also evaluates the mediating role of innovative work behaviour in explaining the relationship between the independent variables and employee performance.

The research model proposed in this study assumes that knowledge sharing and entrepreneurial leadership influence employee performance both directly and indirectly through innovative work behaviour. The conceptual framework illustrates the relationships among the four variables, where innovative work behaviour serves as a mediator linking knowledge sharing and entrepreneurial leadership to employee performance. The research model used in this study is presented in Figure 1.

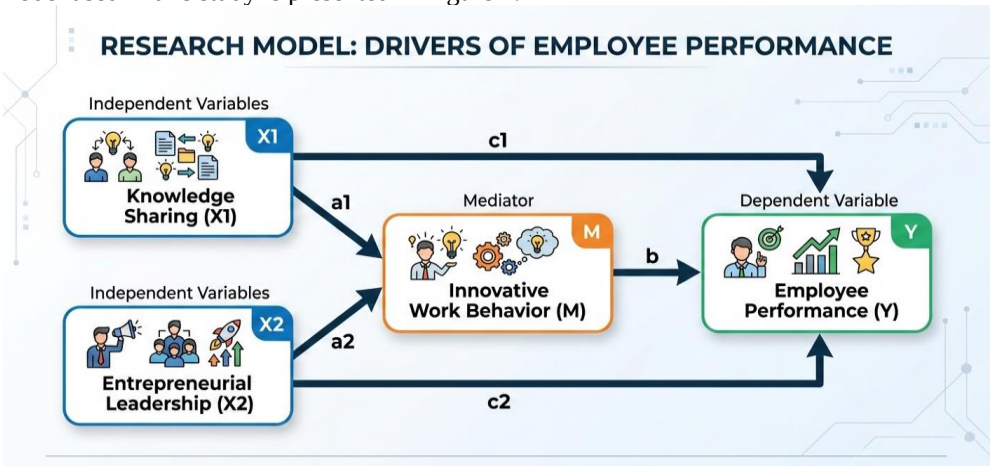

Figure 1. Research Model

The following hypotheses are proposed:
H1: Knowledge sharing has a positive effect on employee performance.
H2: Entrepreneurial leadership positively influences employee performance.
H3: Knowledge sharing has a positive effect on innovative work behaviour.
H4: Entrepreneurial leadership positively influences innovative work behaviour.
H5: Innovative work behaviour has a positive effect on employee performance.
H6: Innovative work behaviour mediates the relationship between knowledge sharing and employee performance.
H7: Innovative work behaviour mediates the relationship between entrepreneurial leadership and employee performance.

3. RESULTS AND DISCUSSION

RESULTS

Table 1. Profile and characteristics of respondents (n = 69)

Attributes	Characteristic	Frequency	Percentage (%)
Region	Kota Medan	9	13.04
	Kota Binjai	5	7.25
	Kota Tebing Tinggi	2	2.90
	Kota Pematang Siantar	3	4.35
	Kota Padang Sidempuan	2	2.90
	Kota Tanjung Balai	3	4.35
	Kota Sibolga	4	5.80
	Kota Gunung Sitoli	2	2.90
	Asahan	4	5.80
	Batubara	3	4.35
	Deli Serdang	8	11.59
	Serdang Bedagai	3	4.35
	Humbang Hasundutan	3	4.35
	Karo	1	1.45
	Langkat	5	7.25
	Mandailing Natal	2	2.90
	Nias	2	2.90
	Padang Lawas Utara	1	1.45
	Pakpak Bharat	2	2.90
	Simalungun	1	1.45
	Tapanuli Selatan	4	5.80

The distribution of respondents shows that the majority of participants are located in Kota Medan, representing 13.04% of the total respondents. This is followed by Deli Serdang with 11.59%, indicating that these areas have a relatively higher representation of batik SMEs in the study. Several other regions such as Kota Binjai and Langkat each contribute 7.25% of the respondents, while Asahan, Sibolga, and Tapanuli Selatan each represent 5.80% of the sample.

Meanwhile, other regions such as Kota Pematang Siantar, Kota Tanjung Balai, Batubara, Serdang Bedagai, and Humbang Hasundutan each account for 4.35% of the respondents. A smaller proportion of respondents come from Kota Tebing Tinggi, Padang Sidempuan, Gunung Sitoli, Mandailing Natal, Nias, and Pakpak Bharat, each contributing 2.90%. Lastly, Karo, Padang Lawas Utara, and Simalungun represent the smallest proportion, each accounting for 1.45% of the total respondents.

This distribution indicates that the respondents involved in this study are geographically diverse across several regions in North Sumatra, providing a broader representation of batik SMEs operating in different local contexts.

Table 2. Path Coefficients

Variable	Entrepreneurial leadership	Innovative Work Behaviour
Entrepreneurial leadership	0.333	0.637
Innovative Work Behaviour	0.408	
Knowledge Sharing	0.259	0.279

The path coefficient results show that entrepreneurial leadership has a positive influence on both innovative work behavior and employee performance. The coefficient value of 0.637 indicates that entrepreneurial leadership strongly contributes to encouraging innovative work behavior among employees. This suggests that leaders who promote creativity, initiative, and opportunity exploration are able to stimulate employees to generate and implement new ideas in their work. Meanwhile, the direct effect of entrepreneurial leadership on employee performance is reflected by the coefficient value of 0.333, indicating that leadership practices that emphasize entrepreneurial characteristics can moderately improve employees' work outcomes.

In addition, the results also demonstrate that knowledge sharing has positive relationships with both employee performance and innovative work behavior, with coefficient values of 0.259 and 0.279, respectively. These findings indicate that when employees actively exchange knowledge, experiences, and skills within the organization, it can contribute to improving work performance and fostering innovative behavior. Furthermore, innovative work behavior itself has a positive effect on employee performance, with a coefficient value of 0.408, suggesting that employees who actively generate and implement new ideas tend to achieve better work results. Overall, these findings highlight the important roles of knowledge sharing and entrepreneurial leadership in enhancing employee performance through the development of innovative work behavior.

Table 3. Outer Loadings

Variable	Entrepreneurial leadership	Employee Performance	Innovative Work Behaviour	Knowledge Sharing
EL 1	0.823			
EL 2	0.803			
EL 3	0.873			
EL 4	0.852			
EL 5	0.889			
EL 6	0.850			
EL 7	0.709			
EL 8	0.825			
EL 9	0.771			
EP 1		0.816		
EP 2		0.859		
EP 3		0.755		
EP 4		0.845		
EP 5		0.489		
EP 6		0.867		
EP 7		0.801		
EP 8		0.838		

EP 9	0.837		
IWB 1		0.847	
IWB 10		0.913	
IWB 11		0.753	
IWB 12		0.584	
IWB 13		0.790	
IWB 14		0.738	
IWB 15		0.599	
IWB 2		0.857	
IWB 3		0.814	
IWB 4		0.594	
IWB 5		0.756	
IWB 6		0.823	
IWB 7		0.884	
IWB 8		0.677	
IWB 9		0.795	
KS 1			0.841
KS 2			0.926
KS 3			0.812
KS 4			0.866
KS 5			0.908
KS 6			0.911
KS 7			0.779

The outer loading results presented in Table 3 indicate that most measurement indicators demonstrate strong relationships with their respective constructs. For the entrepreneurial leadership variable, all indicators show loading values above the recommended threshold of 0.70, ranging from 0.709 to 0.889. These results suggest that the indicators used to measure entrepreneurial leadership have good convergent validity and are considered reliable in representing the construct. Similarly, the knowledge sharing variable also shows strong loading values, ranging from 0.779 to 0.926, indicating that all indicators effectively reflect the knowledge sharing construct.

For the employee performance variable, most indicators also demonstrate acceptable loading values above 0.70, such as EP1 (0.816), EP2 (0.859), EP3 (0.755), EP4 (0.845), EP6 (0.867), EP7 (0.801), EP8 (0.838), and EP9 (0.837). However, the indicator EP5 shows a loading value of 0.489, which is below the recommended threshold. Similarly, several indicators within the innovative work behavior construct show loading values below 0.70, including IWB4 (0.594), IWB8 (0.677), IWB12 (0.584), and IWB15 (0.599). Indicators with loading values below the threshold may weaken the measurement model because they do not sufficiently represent the latent construct.

Therefore, indicators with outer loading values below 0.70 are removed from the measurement model to improve the validity and reliability of the construct measurement. The indicators excluded from the model include EP5, IWB4, IWB8, IWB12, and IWB15. After removing these indicators, the measurement model is re-estimated to obtain a more reliable and valid representation of the constructs. The revised measurement model reflecting the remaining indicators is illustrated in Figure 2, which shows the improved structure of the research model after indicator purification.

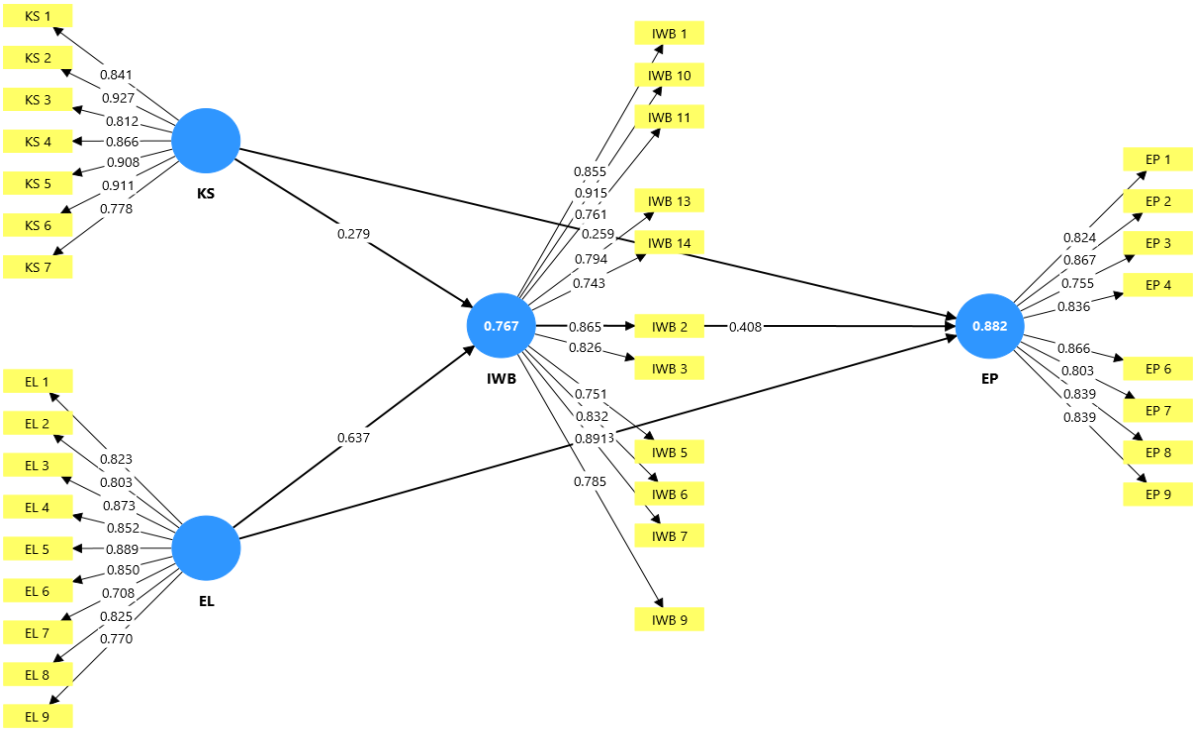

Figure 2. Fix Model

Table 4. Construct Reliability and Validity

Variable	Cronbach's alpha	Composite reliability (rho_a)	Composite reliability (rho_c)	Average variance extracted (AVE)
Entrepreneurial leadership	0.940	0.942	0.950	0.678
Employee Performance	0.935	0.937	0.946	0.688
Innovative Work Behaviour	0.951	0.953	0.958	0.675
Knowledge Sharing	0.943	0.951	0.954	0.748

The construct reliability and validity results presented in Table 4 indicate that all variables in this study demonstrate strong reliability. The Cronbach's alpha values for all constructs are above the recommended threshold of 0.70, indicating a high level of internal consistency among the indicators used to measure each variable. Specifically, entrepreneurial leadership has a Cronbach's alpha value of 0.940, employee performance has 0.935, innovative work behavior shows 0.951, and knowledge sharing has 0.943. These results suggest that the measurement items used in this study consistently represent their respective constructs.

In addition, the values of composite reliability (rho_a and rho_c) for all variables are also above 0.70, confirming the reliability of the constructs in the measurement model. Furthermore, the Average Variance Extracted (AVE) values for all constructs exceed the recommended threshold of 0.50, indicating adequate convergent validity. The AVE values are 0.678 for entrepreneurial leadership, 0.688 for employee performance, 0.675 for innovative work behavior, and 0.748 for knowledge sharing. These findings indicate that the indicators

used in this study are able to explain a substantial proportion of variance in their respective constructs, confirming that the measurement model demonstrates satisfactory reliability and validity.

Table 5. Model Fit Summary

Model Fit	Saturated model	Estimated model
SRMR	0.078	0.078
d_ULS	3.847	3.847
d_G	4.656	4.656
Chi-square	1215.645	1215.645
NFI	0.636	0.636

The model fit results presented in Table 5 provide an evaluation of the overall suitability of the structural model used in this study. The Standardized Root Mean Square Residual (SRMR) value for both the saturated model and the estimated model is 0.078, which is below the commonly recommended threshold of 0.08. This indicates that the model has an acceptable level of fit and that the difference between the observed data and the predicted model is relatively small. In addition, the values of d_ULS (3.847) and d_G (4.656) represent discrepancy measures that indicate the degree of difference between the empirical covariance matrix and the model-implied covariance matrix. These results suggest that the proposed model demonstrates a reasonable level of approximation to the observed data.

Furthermore, the Chi-square value of 1215.645 reflects the overall discrepancy between the sample covariance matrix and the covariance matrix implied by the model. Although the Chi-square value tends to be sensitive to sample size, it is still commonly reported as part of the model fit evaluation. The Normed Fit Index (NFI) value obtained in this study is 0.636, indicating a moderate level of model fit. While this value does not reach the ideal threshold of 0.90, it still suggests that the proposed model is able to explain a considerable portion of the relationships among the constructs. Overall, these results indicate that the structural model used in this study demonstrates an acceptable level of fit and can be used for further hypothesis testing.

Table 6. Results of Model Structural

Hypothesis	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (|O/STDEV|)	P values
EL -> EP	0.333	0.353	0.159	2.089	0.037
EL -> IWB	0.637	0.622	0.128	4.972	0.000
IWB -> EP	0.408	0.386	0.123	3.323	0.001
KS -> EP	0.259	0.262	0.090	2.890	0.004
KS -> IWB	0.279	0.289	0.123	2.272	0.023
KS -> IWB -> EP	0.114	0.117	0.069	1.661	0.097
EL -> IWB -> EP	0.260	0.235	0.080	3.232	0.001

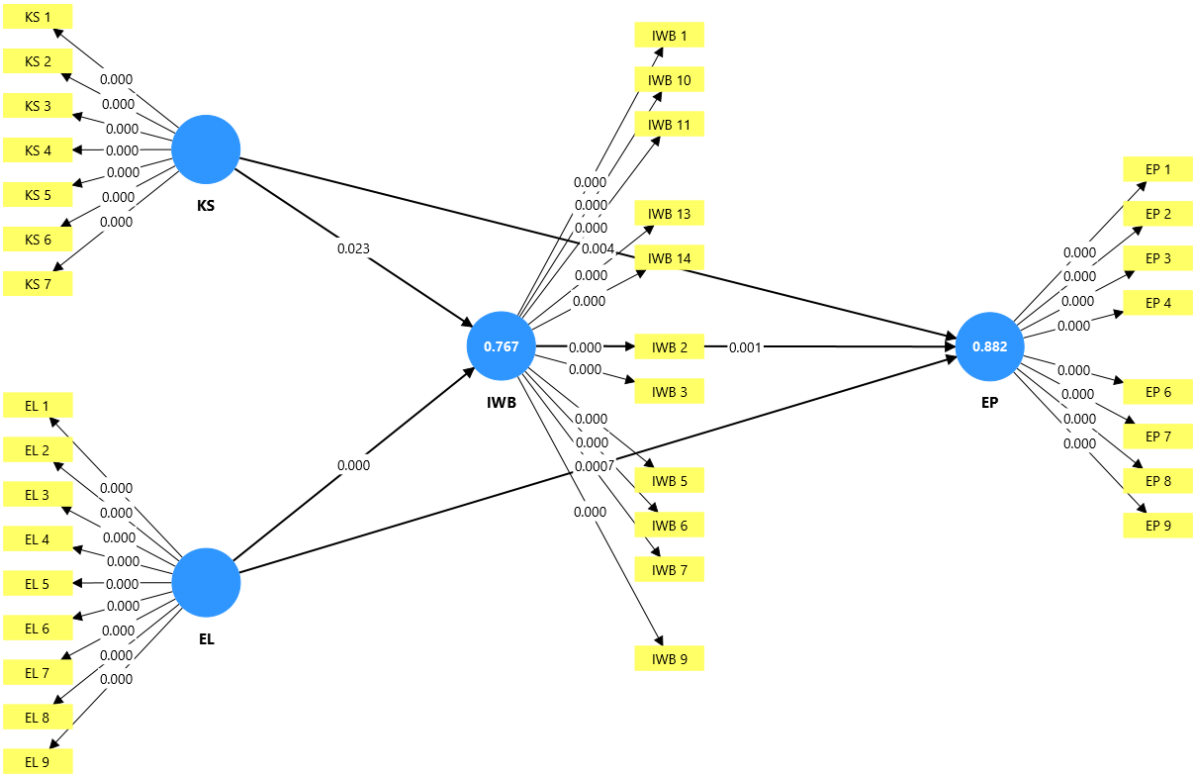

Figure 3. Results of Model Structural

The results of the structural model analysis indicate that knowledge sharing has a positive and significant effect on employee performance, with a path coefficient of 0.259, a t-statistic of 2.890, and a p-value of 0.004. Since the p-value is below the 0.05 significance threshold, H1 is supported. This finding suggests that effective knowledge sharing among employees contributes to improved employee performance [29]. When employees actively exchange knowledge, experiences, and skills, they can enhance their ability to solve problems, complete tasks more efficiently, and improve work productivity. Therefore, knowledge sharing plays an important role in strengthening employee capabilities and performance outcomes within organisations.

The results also show that entrepreneurial leadership has a positive and significant effect on employee performance, with a path coefficient of 0.333, a t-statistic of 2.089, and a p-value of 0.037, which is below the 0.05 threshold. Thus, H2 is supported. This finding indicates that leaders who demonstrate entrepreneurial characteristics—such as encouraging innovation, taking initiative, and recognising opportunities—can positively influence employee performance [30]. In SMEs, entrepreneurial leadership is particularly important because leaders often interact directly with employees and play a key role in motivating them to achieve better work outcomes.

Furthermore, the analysis reveals that knowledge sharing has a positive and significant effect on innovative work behaviour, with a path coefficient of 0.279, a t-statistic of 2.272, and a p-value of 0.023. These results support H3, indicating that knowledge exchange among employees can stimulate innovative work behaviour. When employees share ideas and experiences, they gain new perspectives and insights that encourage them to develop and implement creative solutions in their work activities.

The findings also indicate that entrepreneurial leadership has a strong positive and significant effect on innovative work behaviour, with a path coefficient of 0.637, a t-statistic of 4.972, and a p-value of 0.000. Therefore, H4 is supported. This result suggests that entrepreneurial leaders play a crucial role in fostering an innovative environment within organisations. Leaders who encourage creativity, experimentation, and proactive thinking can motivate employees to generate and apply innovative ideas in their work processes.

In addition, the results show that innovative work behaviour has a positive and significant effect on employee performance, with a path coefficient of 0.408, a t-statistic of 3.323, and a p-value of 0.001. Hence, H5

is supported. This finding implies that employees who actively generate, promote, and implement new ideas tend to achieve higher performance levels. Innovative work behaviour enables employees to improve work processes, enhance efficiency, and contribute to organisational performance.

Regarding the mediation effect, the results show that innovative work behaviour does not significantly mediate the relationship between knowledge sharing and employee performance, with a path coefficient of 0.114, a t-statistic of 1.661, and a p-value of 0.097, which is above the 0.05 threshold. Therefore, H6 is not supported. This suggests that although knowledge sharing directly influences employee performance and innovative work behaviour, the indirect effect through innovative work behaviour is not statistically significant in this study.

Finally, the results indicate that innovative work behaviour significantly mediates the relationship between entrepreneurial leadership and employee performance, with a path coefficient of 0.260, a t-statistic of 3.232, and a p-value of 0.001. Thus, H7 is supported. This finding implies that entrepreneurial leadership enhances employee performance not only directly but also indirectly by encouraging innovative work behaviour. In other words, leaders who foster innovation and creativity can stimulate employees to engage in innovative activities that ultimately improve their performance [31], [32], [33], [34].

DISCUSSION

The findings of this study confirm that knowledge sharing has a positive and significant effect on employee performance. This result is consistent with recent studies emphasizing that knowledge processes are critical drivers of organizational outcomes, particularly in knowledge-based and SME contexts. For instance, recent research highlights that knowledge sharing enhances employee performance by improving learning efficiency, collaboration, and problem-solving capabilities [35]. Similarly, studies grounded in the Knowledge-Based View (KBV) argue that knowledge exchange enables organizations to leverage collective intelligence to achieve superior performance outcomes. However, compared to large-scale or technology-driven organizations, the effect observed in this study is relatively moderate, suggesting that in SMEs—especially in traditional sectors such as batik—knowledge sharing may still be oriented toward operational efficiency rather than strategic innovation.

The positive and significant influence of entrepreneurial leadership on employee performance also aligns with recent empirical findings. Prior research shows that entrepreneurial leadership enhances firm performance by encouraging opportunity recognition, innovation, and proactive behavior among employees [36]. Moreover, studies in emerging economies suggest that entrepreneurial leadership is particularly effective in SMEs due to the close interaction between leaders and employees. Compared to these studies, the present research reinforces the argument that entrepreneurial leadership not only directly influences performance but also plays a broader role in shaping organizational behavior. However, the relatively moderate coefficient indicates that leadership alone is insufficient without being supported by behavioral mechanisms such as innovation.

Furthermore, this study finds that knowledge sharing significantly influences innovative work behavior, supporting prior research that identifies knowledge exchange as a key antecedent of innovation. For example, recent studies show that knowledge sharing positively affects innovative work behavior and facilitates the development of new ideas and solutions [37]. In addition, other studies indicate that knowledge sharing can act as a mediator or enabler of innovation processes within organizations. Compared to these findings, the results of this study suggest that while knowledge sharing does contribute to innovation, its impact may depend on contextual factors such as organizational culture, employee motivation, and leadership support, which are often more constrained in SMEs.

The strong influence of entrepreneurial leadership on innovative work behavior represents one of the most significant findings of this study. This result is consistent with recent literature demonstrating that entrepreneurial leadership plays a crucial role in fostering innovation by creating a supportive climate and encouraging employee creativity [36]. Additionally, studies in the service and hospitality sectors show that leadership styles significantly influence innovative behavior through mechanisms such as knowledge sharing and self-efficacy [38]. Compared to these studies, the higher coefficient found in this research suggests that in SMEs, leadership may act as the primary driver of innovation due to the centralized nature of decision-making and organizational structure.

The findings also confirm that innovative work behavior has a positive and significant effect on employee performance. This is consistent with prior studies that position innovative behavior as a key determinant of individual and organizational performance. Employees who actively generate and implement new

ideas are better equipped to improve efficiency, adapt to changes, and contribute to organizational competitiveness. Recent studies further support this relationship by showing that innovation-oriented behavior directly enhances performance outcomes in both industrial and service sectors [35]. However, this study adds contextual value by demonstrating that in SMEs, innovative work behavior is not only beneficial but also essential for sustaining competitiveness in traditional industries.

An interesting finding emerges in the mediation analysis, where innovative work behavior does not significantly mediate the relationship between knowledge sharing and employee performance. This result contrasts with several prior studies that identify innovation as a mediating mechanism between knowledge processes and performance. For instance, some studies suggest that knowledge sharing enhances performance indirectly through innovation or organizational learning mechanisms. However, the findings of this study indicate that in SMEs, knowledge sharing may have a more direct and practical impact on performance rather than being transformed into innovative outcomes. This suggests a contextual limitation, where knowledge sharing is primarily used for task completion and efficiency rather than creative exploration.

In contrast, innovative work behavior significantly mediates the relationship between entrepreneurial leadership and employee performance. This finding strongly supports recent studies indicating that leadership influences performance through innovation-related mechanisms. For example, research shows that entrepreneurial leadership enhances employee performance by fostering innovative work behavior and creativity [39]. Compared to these studies, the present research provides stronger empirical support for the mediating role of innovative work behavior, particularly in the SME context. This highlights that leadership effectiveness is not only determined by direct influence but also by its ability to create an environment that encourages innovation.

Overall, this study contributes to the literature by offering an integrated framework that combines knowledge sharing, entrepreneurial leadership, and innovative work behavior in explaining employee performance in SMEs. Unlike previous studies that often examine these variables separately, this research demonstrates their simultaneous and interconnected effects. Theoretically, this study extends the understanding of how leadership and knowledge processes interact through behavioral mechanisms to influence performance. Practically, the findings suggest that SME managers should not only focus on facilitating knowledge sharing but also prioritize entrepreneurial leadership practices that actively promote innovation. This dual approach is essential for enhancing employee performance and ensuring long-term competitiveness in dynamic and resource-constrained environments.

4. CONCLUSION

This study aims to examine the role of knowledge sharing and entrepreneurial leadership in improving employee performance, with innovative work behavior acting as a mediating variable. The results indicate that both knowledge sharing and entrepreneurial leadership have a positive and significant effect on employee performance. In addition, knowledge sharing and entrepreneurial leadership were also found to significantly influence innovative work behavior. Employees who actively exchange knowledge and work under entrepreneurial-oriented leadership tend to demonstrate higher levels of creativity, idea generation, and problem-solving capabilities, which contribute to improved work outcomes. Furthermore, innovative work behavior itself has a positive and significant effect on employee performance, indicating that employees who frequently engage in innovative activities are more capable of achieving higher performance levels. The mediation analysis shows that innovative work behavior successfully mediates the relationship between entrepreneurial leadership and employee performance, suggesting that leaders who encourage entrepreneurial thinking can indirectly improve employee performance by fostering innovative behavior among employees. However, innovative work behavior does not significantly mediate the relationship between knowledge sharing and employee performance. This finding suggests that while knowledge sharing directly improves both innovative work behavior and employee performance, its indirect influence through innovation behavior is not strong enough to create a significant mediating effect. Overall, these findings highlight the importance of strengthening knowledge sharing practices and entrepreneurial leadership to encourage innovative work behavior and ultimately enhance employee performance. Future research is recommended to explore additional mediating or moderating variables and to expand the research context to different organizational sectors in order to enrich the understanding of factors influencing employee performance.

REFERENCES

[1] N. T. P. Sari and A. Kusumawati, "Literature review: The efforts to strengthening of micro, small and medium-sized enterprises (MSME) in Indonesia," *Asian J. Manag. Entrep. Soc. Sci.*, vol. 2, no. 01, pp. 98–115, 2022.

[2] T. Tambunan, "Sustainable development goals and the role of MSMEs in Indonesia," *OIDA Int. J. Sustain. Dev.*, vol. 16, no. 01, pp. 51–72, 2023.

[3] R. M. Saputra and H. Darmawan, "Effects of urbanization and the growth of micro, small, and medium enterprises (MSMEs) as supports for the economy of Indonesia in an urban context," *J. Soc. Polit. Sci.*, vol. 4, no. 2, pp. 201–214, 2023.

[4] N. Aprilia, W. T. Subroto, and N. C. Sakti, "The role of small and medium enterprises (SMEs) in supporting the people's economy in Indonesia," *Int. J. Res. Sci. Innov. XI*, pp. 368–376, 2025.

[5] K. J. Sinha, S. Sinha, and B. J. Sinha, "Micro, Small, and Medium-Sized Enterprises (MSMEs): The significant role and challenges in Indonesia's economy," *Int. J. Multidiscip. Res.*, vol. 6, no. 3, p. 20824, 2024.

[6] M. Audina, R. Yunus, K. A. Parinding, and M. A. Nasruddin, "The Role of Micro, Small, and Medium Enterprises in Improving Community Welfare," *Golden Ratio Data Summ.*, vol. 4, no. 1, pp. 81–89, 2024.

[7] B. M. Omowole, A. Q. Olufemi-Phillips, O. C. Ofodile, N. L. Eyo-Udo, and S. E. Ewim, "The role of SMEs in promoting urban economic development: A review of emerging economy strategies," *J. Name Unspecified*, 2024.

[8] A. Enaifoghe and M. F. Vezi-Magigaba, "Conceptualizing the role of entrepreneurship and SME in fostering South Africa's local economic development.," *Int. J. Res. Bus. Soc. Sci.*, vol. 12, no. 4, 2023.

[9] J. Amoah, J. Belas, R. Dziwornu, and K. A. Khan, "Enhancing SME contribution to economic development: A perspective from an emerging economy," *J. Int. Stud.*, 2022.

[10] D. Kalfas, S. Kalogiannidis, V. Ambas, and F. Chatzitheodoridis, "Contribution of the Cultural and Creative Industries to Regional Development and Revitalization: A European Perspective," *Urban Sci.*, vol. 8, no. 2, p. 39, Apr. 2024, doi: 10.3390/urbansci8020039.

[11] S. Pavliuk, "The role of creative industries in local economic development," *Ukr. BLACK SEA Reg. Agrar. Sci.*, vol. 27, no. 1, Feb. 2023, doi: 10.56407/bs.agrarian/1.2023.74.

[12] E. Maziliauske, "Innovation for sustainability through co-creation by small and medium-sized tourism enterprises (SMEs): Socio-cultural sustainability benefits to rural destinations," *Tour. Manag. Perspect.*, vol. 50, p. 101201, Jan. 2024, doi: 10.1016/j.tmp.2023.101201.

[13] V. Kunjuraman, N. A. Mohd Radzi, and D. A. Arimbi, "Revitalizing the Batik Industry in Indonesia: A Scenario Assessment," *Chang. Soc. Personal.*, vol. 9, no. 3, pp. 826–847, Oct. 2025, doi: 10.15826/csp.2025.9.3.355.

[14] L. K. Nuriyanto, "Preservation of the Batik Industry in Indonesia as Part of the National Identity," *Int. J. Sci. Appl. Sci. Conf. Ser.*, vol. 6, no. 2, p. 1, Dec. 2022, doi: 10.20961/ijsascs.v6i2.73912.

[15] A. Octavia, H. Heriberta, and Y. Sriayudha, "A STUDY OF JAMBI BATIK ARTISANS IN INNOVATION AND STRATEGIC DECISION-MAKING TO INFLUENCE THE DEVELOPMENT AND RESILIENCE OF THE JAMBI BATIK INDUSTRY," *J. Ilm. Ilmu Terap. Univ. Jambi*, vol. 8, no. 2, pp. 760–772, Nov. 2024, doi: 10.22437/jiituj.v8i2.38037.

[16] N. A. A. Abdelwahed and M. A. Al Doghan, "Developing Employee Productivity and Performance through Work Engagement and Organizational Factors in an Educational Society," *Societies*, vol. 13, no. 3, p. 65, Mar. 2023, doi: 10.3390/soc13030065.

[17] T. D. N. Vuong and L. T. Nguyen, "The Key Strategies for Measuring Employee Performance in Companies: A Systematic Review," *Sustainability*, vol. 14, no. 21, p. 14017, Oct. 2022, doi: 10.3390/su142114017.

[18] M. Zamiri and A. Esmaeili, "Methods and Technologies for Supporting Knowledge Sharing within Learning Communities: A Systematic Literature Review," *Adm. Sci.*, vol. 14, no. 1, p. 17, Jan. 2024, doi: 10.3390/admsci14010017.

[19] A. Sivakumar, S. Jayasingh, and S. Shaik, "Social Media Influence on Students' Knowledge Sharing and Learning: An Empirical Study," *Educ. Sci.*, vol. 13, no. 7, p. 745, Jul. 2023, doi: 10.3390/educsci13070745.

[20] A. Nawaz, J. Wenqi, and S. Akhtar, "Entrepreneurial leadership and organizational performance:

employee creativity and behavior," *Manag. Decis.*, vol. 63, no. 7, pp. 2486–2510, Jun. 2025, doi: 10.1108/MD-02-2024-0317.
[21] R. Ageli, A. B. Alzubi, H. Y. Aljuhmani, and K. Iyiola, "How and When Entrepreneurial Leadership Drives Sustainable Bank Performance: Unpacking the Roles of Employee Creativity and Innovation-Oriented Climate," *Sustainability*, vol. 17, no. 20, p. 9259, Oct. 2025, doi: 10.3390/su17209259.
[22] D. P. Srirahayu, D. Ekowati, and A. R. Sridadi, "Innovative work behavior in public organizations: A systematic literature review," *Heliyon*, vol. 9, no. 2, p. e13557, Feb. 2023, doi: 10.1016/j.heliyon.2023.e13557.
[23] H. S. AlEssa and C. M. Durugbo, "Systematic review of innovative work behavior concepts and contributions," *Manag. Rev. Q.*, vol. 72, no. 4, pp. 1171–1208, Dec. 2022, doi: 10.1007/s11301-021-00224-x.
[24] F. Mulisa, "When Does a Researcher Choose a Quantitative, Qualitative, or Mixed Research Approach?," *Interchange*, vol. 53, no. 1, pp. 113–131, Mar. 2022, doi: 10.1007/s10780-021-09447-z.
[25] E. Barroga *et al.*, "Conducting and Writing Quantitative and Qualitative Research," *J. Korean Med. Sci.*, vol. 38, no. 37, 2023, doi: 10.3346/jkms.2023.38.e291.
[26] A. Almusaed, A. Almssad, and I. Yitmen, "Introduction to Quantitative Research," in *Practice of Research Methodology in Civil Engineering and Architecture*, Cham: Springer Nature Switzerland, 2025, pp. 489–528. doi: 10.1007/978-3-031-97393-2_15.
[27] W. M. Lim, "What Is Quantitative Research? An Overview and Guidelines," *Australas. Mark. J.*, vol. 33, no. 3, pp. 325–348, Aug. 2025, doi: 10.1177/14413582241264622.
[28] A. Ghanad, "An Overview of Quantitative Research Methods," *Int. J. Multidiscip. Res. Anal.*, vol. 06, no. 08, Aug. 2023, doi: 10.47191/ijmra/v6-i8-52.
[29] F. Olan, E. Ogiemwonyi Arakpogun, J. Suklan, F. Nakpodia, N. Damij, and U. Jayawickrama, "Artificial intelligence and knowledge sharing: Contributing factors to organizational performance," *J. Bus. Res.*, vol. 145, pp. 605–615, Jun. 2022, doi: 10.1016/j.jbusres.2022.03.008.
[30] A. Razzaque, I. Lee, and G. Mangalaraj, "The effect of entrepreneurial leadership traits on corporate sustainable development and firm performance: a resource-based view," *Eur. Bus. Rev.*, vol. 36, no. 2, pp. 177–200, Mar. 2024, doi: 10.1108/EBR-03-2023-0076.
[31] A. Bagheri, M. Akbari, and A. Artang, "How does entrepreneurial leadership affect innovation work behavior? The mediating role of individual and team creativity self-efficacy," *Eur. J. Innov. Manag.*, vol. 25, no. 1, pp. 1–18, 2022.
[32] I. N. Adu, K. O. Boakye, S. Yeboah, and E. Twumasi, "Entrepreneurial leadership and employee performance; the role of innovative work behavior among employees in the food and beverages industry," *Int. Hosp. Rev.*, 2024.
[33] K. Ercantan, Ş. Z. Eyupoglu, and Ö. Ercantan, "The Entrepreneurial Leadership, Innovative Behaviour, and Competitive Advantage Relationship in Manufacturing Companies: A Key to Manufactural Development and Sustainable Business," *Sustainability*, vol. 16, no. 6, p. 2407, Mar. 2024, doi: 10.3390/su16062407.
[34] S. ABUALOUSH, A. M. OBEIDAT, M. A. ABUSWEILEMA, and M. M. KHASAWNEH, "HOW DOES ENTREPRENEURIAL LEADERSHIP PROMOTE INNOVATIVE WORK BEHAVIOUR? THROUGH MEDIATING ROLE OF KNOWLEDGE SHARING AND MODERATING ROLE OF PERSON-JOB FIT," *Int. J. Innov. Manag.*, vol. 26, no. 01, Jan. 2022, doi: 10.1142/S1363919622500116.
[35] V. Y. Isdiani and K. D. Tania, "The Influence of Knowledge Management on Employee Performance and Innovative Work Behavior at PT. PBT SITE Bukit Asam," *Indones. Interdiscip. J. Sharia Econ.*, vol. 8, no. 1, pp. 979–999, 2025.
[36] M. A. Malibari and S. Bajaba, "Entrepreneurial leadership and employees' innovative behavior: A sequential mediation analysis of innovation climate and employees' intellectual agility," *J. Innov. Knowl.*, vol. 7, no. 4, p. 100255, Oct. 2022, doi: 10.1016/j.jik.2022.100255.
[37] T. Islam, I. Zahra, S. U. Rehman, and S. Jamil, "How knowledge sharing encourages innovative work behavior through occupational self-efficacy? The moderating role of entrepreneurial leadership," *Glob. Knowledge, Mem. Commun.*, vol. 73, no. 1/2, pp. 67–83, Jan. 2024, doi: 10.1108/GKMC-02-2022-0041.
[38] N. Nyoman Suliati, Noermijati, A. Sudiro, and D. Tri Kurniawati, "Transformational leadership and innovative work behavior: The sequential mediating role of knowledge sharing and creative self-

efficacy," *Probl. Perspect. Manag.*, vol. 23, no. 3, pp. 358–371, Aug. 2025, doi: 10.21511/ppm.23(3).2025.26.

[39] R. Tri Setyo Prasojo and A. Rizki Sridadi, "Peran Mediasi Creative Self-Efficacy Dan Knowledge Sharing Pada Pengaruh Entrepreneurial Leadership Terhadap Innovative Work Behavior Karyawan R&D Industri Food & Baverage Di Kota Malang," *J. GeoEkonomi*, vol. 16, no. 2, pp. 373–392, Sep. 2025, doi: 10.36277/geoekonomi.v16i2.634.