Original Research

The effect of knowledge management processes on employee performance through mediation of employee satisfaction: A case of tanneries in the Oromia region

Ereso Negi[1*], Matiwos Ensermu[2] & Aman Abdie[3]

[1]Research Scholar, Department of Management, Bahir Dar University, Bahir Dar. Ethiopia
[2]Department of Logistics and Supply Chain Management, Addis Ababa University, Addis Ababa, Ethiopia
[3]Department of Management, Bahir Dar University, Bahir Dar, Ethiopia

Abstract	Article Information
The study aimed to examine the effect of KM on employee performance through a mediation of employee satisfaction. The study utilised an explanatory research design and stratified purposive sampling for data selection and a closed-ended questionnaire from 339 employees of 11 tanneries in the Oromia region and analysed by SEM-PLS software. The research findings indicated that the direct relations between knowledge sharing, knowledge utilisation, and employee satisfaction were positive and significant, while the direct relationships between knowledge creation, knowledge storage, and employee satisfaction were not significant. The direct relation between knowledge creation, knowledge storage, and knowledge sharing and employee performance was not significant, whereas the relation between knowledge utilisation and employee performance was positive and significant. The direct relation between employee satisfaction and employee performance was positive and significant. The indirect relation between KM variables and employee performance through the mediation of satisfaction of employees was not statistically significant. Therefore, tanneries should prioritise knowledge creation, knowledge storage, knowledge sharing, and employee satisfaction to enhance employee performance. The tanneries should adapt KM guidelines to advance employee performance. The authors recommended further studies to focus on KM and human behaviour and KM and organisational performance.	 *Corresponding Author: Ereso Negi E-mail: eresonegi@gmail.com

INTRODUCTION

The concept of knowledge management (KM) has appeared as an academic discipline closely tied to rapid industrial development, fostering employee technological advancement and driving innovation. The challenges due to development at the end of the 20th century, particularly in the 1990s, forced the notion of knowledge management to be considered as a global concern. The need for competent managers who have the skills to recognise, arrange, incorporate, and supervise organisational knowledge assets arises. This

was also the situation that demanded the emergence of knowledge management dating from the 1960s (Barbier & Tengeh, 2022). Tracing back to the origins of KM at the end of the 20th century, its foundation can be firmly rooted in the pioneering work of Peter Drucker, who showed insights into the strategic importance of managing employee knowledge to realise a firm's competitive advantage (Alavi & Leidner, 2022).

The companies require relevant KM to improve employee performance and achieve organisational goals. Its relevance must be customised to suit the purpose, development level, and technological advancement. As an academic discipline, the concern of KM was attracting the attention of scholars, and the number of articles in the subject area increased rapidly two decades after the 1970s. For instance, in the 1980s, more than ten papers were published, and in the 1990s, more than two-fold papers were published.

According to the intention of KM, the organisation's most valuable resource is its people and the knowledge they possess (Endende et al., 2022). By effectively leveraging this knowledge, organisations can better respond to unexpected challenges, make informed decisions, and improve the efficiency and performance of their employees (Ştefan et al., 2024). Therefore, firms can increase employee productivity and performance, make sound decisions, and respond more effectively to unforeseen situations by utilising this knowledge.

KM is vital to firm survival, sustainability, and competitiveness by improving employee efficiency and work performance (Tekle, 2024). It is a process that helps workforces move in the direction of accomplishing their jobs with a new, different, and better approach (Ştefan et al., 2024). So, employee performance is negatively or positively affected by KM practices. Therefore, KM has a fundamental role in increasing employee work performance and realising the firm's success.

Knowledge management is vital across various dimensions of organisational management, yet significant research gaps remain, particularly regarding its relationship with employee performance (Sinaga et al., 2020). Despite its importance in enhancing organisational success, studies specifically addressing the effect of KM on employees performance were observed to be not sufficient (Fadaie et al., 2023). Respectively, employee knowledge and skill gaps, rejection of finished products due to the product quality, theoretical and methodological gaps, and limitations in the use of recent and advanced software as data analysis tools were the limitations that led the researchers to conduct the study (Alavi & Leidner, 2022). The researchers used the more advanced SEM-PLS approach to better test the relationships between the variables to examine the effect of KM processes on employee performance through a mediation of employee satisfaction in tanning firms. In particular, this study intended to attain the following specific objectives aligning with corresponding hypotheses, such as to examine the direct effects of KM processes on employee satisfaction (H_1-H_4), to investigate the direct effects of KM processes on employee performance (H_5-H_8), to assess the direct effects of employee satisfaction on employee performance (H_9), and to examine the indirect effects of KM processes on employee performance through employee satisfaction (H_{10}-H_{13}).

MATERIALS AND METHODS

This study used an explanatory research design based on its significance to test the relationships between constructs (Ahmad et al., 2014). The analysis of this study was based on data collected from 339 respondents from 11 tanneries (i.e., Ethio Tannery 540, Friedship Tannery 450, Kolba Tannery 335, JXZ Tannery 250, Dx Tannery 250, Mesako Gilobal (Huada Chen) Tannery 250, Mojo Tannery 178, Ferida Tannery 95, East Africa Tannery 95, United Vasin Tannery 90, and Hora Tannery 73). Overall, 2,606 employees were considered as the total population of the study, and the sample sizes were proportionally selected from each of the tanneries.

The sample size was determined utilising stratified purposive sampling techniques to ensure specific subgroups within a population that adequately represent the whole population, which enhances the validity and reliability of the research findings. The tanneries' employees were categorised into three homogeneous groups: operations employees, technical employees, and supportive staff, to proportionally distribute the sample size, and the respondents were purposefully selected from each stratum. The primary data has been collected through closed-ended structured questionnaires, which were modified and constructed based on the Muhidin et al. (2022) approach. In this study, the research data was analysed using SEM-PLS software for its suitability to analyse complex relationships between variables, its effectiveness in examining complex relationships between variables, its compatibility with purposive sampling, and its appropriateness for studies requiring specific sample selection criteria (Ştefan et al., 2024). The respondents were 339 employees (257 male and 82 female) who have above two years of experience at the tannery. The reliability of data collection tools was tested through the Cronbach alpha coefficient α = 0.88 > 0.7 in the acceptable range (Boateng et al., 2018).

RESULTS AND DISCUSSIONS
Results

Structural Equation Modelling (SEM-PLS)

It is statistical software used to test direct and indirect relationships between variables. It measures through the outer (measurement) model and the inner model.

The outer (measurement) model

The outer model defines the relationship between observed variables or indicators and the latent constructs (Hair et al., 2022). It is measured through testing internal consistency, convergent validity, and discriminant validity. To be acceptable, factor loading must be ≥ 0.50, Cronbach's alpha must be ≥ 0.70, average variance extracted (AVE) must be ≥ 0.50, and CR has to be ≥ 0.70 (Ştefan et al., 2024). As it was demonstrated in Table 1, all of the outer (measurement) model test values of factor loading, Cronbach's alpha value, AVE, and CR were in the acceptable range. A discriminant validity test is useful to determine how strongly correlated indicators are to their construct compared to other constructs (Henseler et al., 2015). The indicator's cross-loading with its construct determines discriminant validity. The Fornell and Larcker criterion and the HTMT (Heterotrait-Monotrait) ratio were used to investigate the construct's ability to predict its indicator.

Table 1

Convergent/Construct validity

Items	Fac. Loading	Cron. alpha	AVE	CR
EP	0.787	0.730	0.787	0.731
ES	0.564	0.719	0.564	0.784
KCreat	0.688	0.884	0.688	0.894
KShare	0.742	0.884	0.742	0.885
KStor	0.821	0.891	0.821	0.899
KUtiliz	0.736	0.821	0.736	0.828

If an indicator's cross-loading value is higher with its intended construct than with other constructs, it indicates that the construct predicts the indicator more accurately than other constructs (Hair et al., 2022). Hence, the discriminant validity scales are said to be valid if the highest value in the test is at the top of each column (Franke & Sarstedt, 2019). Thus, the results of these tests met the discriminant validity requirement according to the Fornell-Larcker criterion (Table 2).

Table 2

Discriminant Validity (Fornell-Larcker Criterion)

Descriptions	EP	ES	K. Creation	K. Sharing	K. Storing	K. Utilization
EP	0.887					
ES	0.535	0.751				
K. Creat	0.519	0.604	0.830			
K. Sharing	0.512	0.635	0.770	0.862		
K. Storing	0.440	0.552	0.650	0.657	0.906	
K. Utilization	0.546	0.615	0.697	0.669	0.530	0.858

The HTMT results are considered acceptable if the values for the ratio of correlations between two variables are less than 0.90 (Franke & Sarstedt, 2019). In Table 3, the HTMT ratio of all values was less than 0.90, which is in the acceptable range of discriminant validity.

Table 3

Discriminant Validity HTMT- Matrix

Descriptions	EP	ES	K. Creation	K. Sharing	K. Storing
EP					
ES	0.724				
K. Creation	0.642	0.745			
K. Sharing	0.637	0.774	0.871		
K. Storing	0.542	0.683	0.739	0.740	
K. Utilization	0.699	0.778	0.809	0.783	0.619

Multicollinearity Test

The multicollinearity test is a statistical method the researchers use to determine the level of correlation between independent variables in a regression model (Shrestha, 2020).

Multicollinearity is measured by the variance inflation factor (VIF). Hence, for the VIF values to be acceptable, they should be below 5.5 (Salmerón et al., 2018). In this study, VIF values were below 5.5 and acceptable, while the highest value of VIF was 4.885 (Table 4).

Table 4

Multicollinearity result [outer model]

Descriptions	VIF value
EP2	1.492
EP4	1.492
KCreat2	2.847
KCreat4	2.678
KCreat5	1.493
KShar1	2.547
KShar2	2.744
KShar4	1.811
KStor1	2.345
KStor2	3.225
KStor3	2.686
KUtiliz1	1.989
KUtiliz3	1.720
Kutliz2	1.874
Satisfa3	1.080
Satisfa5	2.843
Satisfa6	2.850

Latent Variables—Correlations

The correlation coefficient indicates the level of the strength of a linear relationship between the variables (Shrestha, 2020). In SEM-PLS, correlations below 0.8 are generally considered acceptable to avoid multicollinearity issues (Fadaie et al., 2023). The correlation value of the research data was below 0.8 and acceptable (Table 5).

Table 5

Latent Variables- Correlations

Description	Alpha	EJP	KCreat	KShar	KStor	Satisfa
Alpha	1.000	0.717	0.713	0.714	0.581	0.662
EJP	0.717	1.000	0.718	0.716	0.611	0.642
KCreat	0.713	0.718	1.000	0.710	0.712	0.721
KShar	0.714	0.716	0.710	1.000	0.712	0.701
KStor	0.581	0.611	0.712	0.71	1.000	0.722
Satisfa	0.662	0.642	0.721	0.701	0.722	1.000

Inner (Structural) Model Path-Coefficients Assessment

The inner model examines a combination of factor analysis and multiple regression or path analysis and is used to examine the structural relationships between measured variables and latent variables (Hair et al., 2022). Therefore, the inner model was measured by testing R^2 values, effect sizes (f^2), and predictive relevance (Q^2).

R-squared

R-squared measures "how well the independent variables explain the dependent variable in regression"; it helps to measure the goodness of fit of the model. The R-squared values are considered to be acceptable if $R^2 >= 0.26$ (Hair et al., 2022).

In this study, the R2 value for ES = 0.668 and the R2 value for EP = 0.566 were higher than the determined level and substantial and acceptable.

This means that the four latent variables significantly explain 64.9% of the variance in employee satisfaction with the endogenous variable; knowledge creation, knowledge storage, knowledge sharing, knowledge utilisation, and employee satisfaction together significantly explain 64.6% of the variance of employee performance.

f-square

The model's effect size (f^2) measures the accuracy with which exogenous variables predict endogenous variables (Hair et al., 2022). The effect size ranges between 0.02, 0.15, and 0.35. Where f2 = 0.02 denotes a minor effect, f2 = 0.15 is a medium effect, and f2 = 0.35 is a significant effect (Sarstedt et al., 2020). According to the research data in Table 6, the f^2 value between ES and EP is 0.048; K. Creation, K. Share, and K. Storage and EP were 0.006, 0.003, and 0.003, respectively; and K. Creation and ES were 0.006, which were very weak effects, while the others had minor effects.

Model Fit: LV Prediction Summary (PLS)

The research model acceptance can also be determined by calculating the Standardised Root Mean Square Residual (SRMR), and the SRMR is less than or equal to 0.08, and the model fit is within a range of acceptable good model fit (Wah, 2023).

Table 6

f-square value

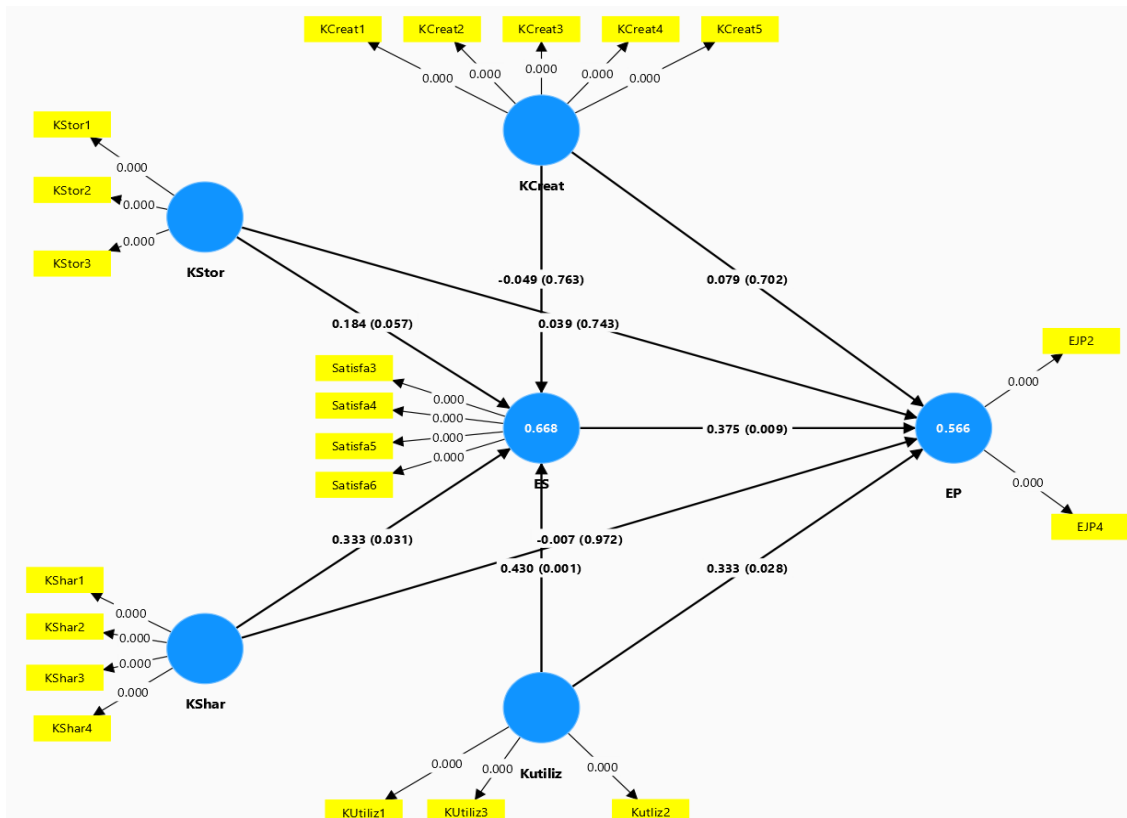| Descriptions	EP	ES
EP		
ES	0.048	
K. Creation	0.006	0.006
K. Sharing	0.003	0.045
K. Storing	0.003	0.029
K. Utilization	0.041	0.076

Figure 1. *Inner Model*

Discussion

Structural model hypotheses testing

The statistical significance of the path coefficients between independent and dependent variables was examined using structural models (Hair et al., 2022). In the process, a SEM-PLS algorithm and a bootstrapping procedure evaluate the significance level of structural relationships using path coefficients and t-values by drilling down into the model (Marcoulides et al., 2019). Figure 1 gives the pictorial explanation of the structural model, which is obtained by running the bootstrapping with 5,000 subsamplings. The statistics used for the acceptance of these hypotheses are t-statistics and p-values. According to Winship, C., and Zhuo (2020), the acceptance criteria for t-statistics is 1.96, while the p-value should be less than 0.05.

Direct relationship (hypothesis testing)

Regarding direct relationships, researchers have tested nine hypotheses (H1–H9) that depend on the research data demonstrated in Table 7.

Table 7

Direct Relationships

Descriptions	Original Sample (β)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (|O/STDEV|)	P Values	Hypothesis	Indication
K. Creation -> ES	-0.049	-0.061	0.164	0.301	0.763	H1	Not supported
K. Store -> ES	0.184	0.186	0.096	1.906	0.057	H2	Not supported
K. Sharing -> ES	0.333	0.333	0.154	2.162	0.031	H3	Supported
K. Utilization -> ES	0.430	0.443	0.129	3.342	0.001	H4	Supported
K. Creation -> EP	0.061	0.057	0.213	0.286	0.775	H5	Not supported
K. Store -> EP	0.108	0.111	0.119	0.905	0.366	H6	Not supported
K. Sharing -> EP	0.118	0.112	0.202	0.584	0.559	H7	Not supported
K. Utilization -> EP	0.494	0.504	0.128	3.864	0.000	H8	Supported
ES -> EP	0.375	0.378	0.143	2.622	0.009	H9	Supported

H1: Knowledge creation significantly affects employee satisfaction in tanneries in the Oromia region.

The direct relationship between knowledge creation and employee satisfaction was positive but statistically insignificant, with coefficients (β = -0.049 at p-value = 0.763, which is higher than the accepted level of $p < 0.05$) and did not support hypothesis **H1**. The insignificant coefficient (p-value = 0.763) indicates that knowledge creation alone does not have a meaningful direct effect on employee satisfaction.

H2: Knowledge storage significantly affects employee satisfaction in tanneries in the Oromia region.

The relationship between knowledge storage and employee satisfaction was not statistically significant. The beta coefficient β = 0.184 and

the p-value = 0.057 were greater than the accepted level of $p < 0.05$ and did not support hypothesis **H2**. The non-significant coefficient p-value = 0.763 indicates that knowledge storage only hasn't had a meaningful effect on employee satisfaction, which was the reverse of Alegre et al.'s (2013) finding that knowledge storing has a significant and positive effect on employee satisfaction.

H3: Knowledge sharing significantly affects employee satisfaction in tanneries in the Oromia region.

The direct path from knowledge sharing to employee satisfaction was positive and statistically significant. The path coefficient (β) is 0.333, and the p-value is 0.031 (P = 0.031 < 0.05). It was the replication of Akhavan & Hosseini's (2016) finding that revealed that knowledge sharing has a positive and

significant effect on employee satisfaction. Hence, the result supported hypothesis **H3**. The path coefficient 0.333 indicated a moderately strong positive relationship between the variables. As one variable increases, the other variable tends to increase by 0.333 units, keeping all other variables constant.

H4: Knowledge utilisation significantly affects employee satisfaction in tanneries in the Oromia region.

The direct relationship between knowledge utilisation and employee satisfaction was positive and statistically significant. The path coefficient (β) is 0.430, and the p-value is 0.001 (P = 0.001 < 0.05). Hence, the result supported hypothesis H4, which was the replication of Asrar-ul-Haq & Anwar (2016). The path coefficient of 0.430 indicated a moderately strong positive relationship between the variables. As one variable increases, the other tends to increase by 0.430 units, keeping all other variables constant.

H5: Knowledge creation significantly affects the performance of employees in tanneries in the Oromia region.

Regarding the direct path from knowledge creation to employee performance, the path coefficient p-value = 0.775, higher than the acceptable standard p < 0.05, indicating that it was not statistically significant. This finding did not support Masa'deh et al.'s (2015) finding that knowledge creation positively and significantly affected employee performance. The hypothesis testing result did not support **H5**. The beta coefficient of 0.061 suggests a relatively positive relationship between the variables.

H6: Knowledge storage significantly affects the performance of employees in tanneries in the Oromia region.

The direct relationship between knowledge storage and employee performance was statistically insignificant. The beta coefficient β = 0.108 and p = 0.366 > 0.05 is higher than the accepted level of p < 0.05 and did not support hypothesis **H6,** which was the reverse of Orzano et al.'s (2007) finding that knowledge storing has a positive and significant effect on employee performance. The non-significant coefficient p-value = 0.108 indicates that knowledge storage alone did not have a meaningful direct effect on employee performance.

H7: Knowledge sharing significantly affects the performance of employees in tanneries in the Oromia region.

The direct path from knowledge sharing to employee performance was statistically insignificant. The beta coefficient value, β = 0.118, suggested weak positive relationships between variables, while p = 0.559 > 0.05 indicated that the result of the hypothesis test did not support hypothesis **H7**. This result did not support Dong et al.'s (2017) finding that knowledge sharing enhances employee performance. The insignificant coefficient p-value = 0.559 indicates that knowledge storage alone did not have a significant direct effect on employee performance.

H8: Knowledge utilisation significantly affects employee performance in tanneries in the Oromia region.

The direct relationship between knowledge utilisation and employee performance was positive and statistically significant. The path

coefficient (β) of 0.494 indicates positive relationships between the variables. The p-value of 0.000 (P = 0.000 < 0.05) shows that the relationship is statistically significant at the 95% confidence level. Therefore, the result supported hypothesis **H8,** which was similar to Asrar-ul-Haq & Anwar's (2016) finding that knowledge utilisation increased employee performance. The beta coefficient of 0.494 indicates that a one-unit change in the exogenous variable is associated with a 0.494-unit change in the endogenous variable.

H9: Employee satisfaction significantly affects employee performance in tanneries in the Oromia region.

The direct relationship between employee satisfaction and employee performance was positive and statistically significant. The beta coefficient β = 0.375 indicates weak positive relationships between variables, while p = 0.009 > 0.05 suggests that the result of the hypothesis test supported hypothesis **H9,** which was the replicative finding of Orzano et al. (2007) showed that employee satisfaction affected employees' performance. The insignificant coefficient p-value = 0.009 indicates that knowledge storage alone did not have a significant direct effect on employee performance.

Table 8

Indirect Relationships

Description	Original Sample (β)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (|O/STDEV|)	P Values	Hypot.	Indication
K. Creation -> ES -> EP	-0.019	-0.025	0.069	0.269	0.788	H$_{10}$	Not supported
K. Storing -> ES -> EP	0.069	0.071	0.049	1.413	0.158	H$_{11}$	Not supported
K. Sharing -> ES -> EP	0.125	0.128	0.083	1.503	0.133	H$_{12}$	Not supported
K.Utilization -> ES -> EP	0.161	0.167	0.084	1.928	0.054	H$_{13}$	Not supported

Indirect relationship (hypothesis testing)

Examining indirect relationships between KM processes and employee performance through a mediation of employee satisfaction was based on the test of four research hypotheses (Table 8), such as H10, H11, H12, and H13:

H10: Knowledge creation significantly affects employee performance in employee satisfaction in tanning firms in the Oromia region.

The indirect relationship between knowledge creation and employee performance through employee satisfaction was not statistically significant. Because the p-value of 0.788 was higher than the acceptable level of p < 0.05, the negative sign of the beta coefficient (-0.019) indicates that the relationship between variables was negative. Therefore, the p-value (p = 0.788) suggested that the test result did not support hypothesis **H10**, which was not supported by Tohidinia & Mosakhani's (2010)

idea that showed the role of employee satisfaction in enhancing employee performance by mediating knowledge creation and employee performance.

H11: Knowledge storage significantly affects employee performance through employee satisfaction in tanning firms in the Oromia region.

The indirect path from knowledge storage to employee performance through employee satisfaction was not statistically significant. In this regard, the p-value of 0.158 was higher than the acceptable level of $p < 0.05$, and the beta coefficient of 0.069 indicates that the relationship between variables was positive. Likewise, the p-value of 0.069 indicated that the test result was statistically not significant and did not support hypothesis **H11**, the role of employee satisfaction to increase employee performance by mediating between knowledge storage and employee performance.

H12: Knowledge sharing significantly affects employee performance through employee satisfaction in tanning firms in the Oromia region.

The indirect relationship between knowledge sharing and employee performance through employee satisfaction, with a beta coefficient of 0.125, indicates that the relationship between the variables was positive. The p-value of 0.133, which was higher than 0.05, suggested the relationship was not statistically significant. Therefore, the p-value of 0.133 indicated that the test result did not support hypothesis **H12,** which was not similar to Sohail & Delin's (2013) finding that revealed employee satisfaction had a mediating role in increasing performance in the relationship between knowledge sharing and employee performance.

H13: Knowledge utilisation significantly affects employee performance through employee satisfaction in tanning firms in the Oromia region.

The indirect relationship between knowledge utilisation and employee performance through a mediating variable, employee satisfaction, was not statistically significant. The beta coefficient of 0.161 indicated that the relationship between the variables was positive. The p-value of 0.054 was higher than the acceptable level of $p < 0.05$, and the relationship was not statistically significant. According to the test result, the hypothesis H11 was not supported, which was not the same finding as Masadeh et al.'s (2019) finding that showed that knowledge utilisation affected employee performance through employee satisfaction. This idea was extracted from the researchers' findings when they examined the mediating role of employee satisfaction between knowledge utilisation and employee performance.

CONCLUSION

This study aimed to examine the relationships between KM and employee performance through the mediation of employee satisfaction. The study used a concurrent explanatory research design to analyse numerical research that was collected from 339 respondents of 11 tanneries in the Oromia region and analysed using SEM-PLS software. The direct relationships between knowledge sharing and employee satisfaction and knowledge utilisation and employee satisfaction were positive and significant, while the direct relationships between knowledge creation and employee satisfaction and knowledge creation and storage and employee

satisfaction were not significant and did not support the hypotheses.

The direct relationships between knowledge creation and employee performance, knowledge storage and employee performance, and knowledge sharing and employee performance were not significant, while the relationship between knowledge utilisation and employee performance was positive and significant. The direct relationship between employee satisfaction and employee performance was positive and significant. The indirect relationships between variables in the KM and the performance of employees through the mediating variable, the satisfaction of employees, were not statistically significant.

This result indicated that tanneries were at an insufficient status in their practices of knowledge creation, storage, and sharing, as well as in fostering employee satisfaction. These findings provide an indication for tanneries management to focus on knowledge creation (training, learning, discussions, etc.), knowledge storage (documentation in hardcopy and softcopy, publication, backup, etc.), and knowledge sharing (experience sharing, teaching, training, etc.) in practical implementation. The tanneries' managers should prioritise employee satisfaction, viewing it through the lens of human behaviour, to enhance employee performance. The tanneries management has to adapt KM guidelines to advance employee performance. The authors recommend that further studies focus on the relationship between KM and human behaviour in firms, as well as the connection between KM and organisational performance.

CRediT authorship contribution statement

Ereso Negi: Conceptualisation, framework, literature, methodology, software, analysis, and editing.

Matiwos Ensermu: supervision, review, and validation.

Aman Abdie: Technical support, software, and visualisation.

Declaration

The authors declare that they have no competing interests to disclose.

Ethical approval statement

The authors obtained an ethical clearance letter from Mojo Environmental Protection Authority that indicates the research data was collected safely, ensuring that no harm was inflicted on the firms or respondents during the data collection process.

Data Availability

All data can be obtained from the corresponding author upon request.

REFERENCES

Ahmad, A., Bello, M. U., Kasim, R., & Martin, D. (2014). Positivist and non-positivist paradigm in social science research: Conflicting paradigms or perfect partners? *Journal of Management and Sustainability*, *4*(3). https://doi.org/10.5539/jms.v4n3p79

Akhavan, P., & Mahdi Hosseini, S. (2016). Social capital, knowledge sharing, and innovation

capability: an empirical study of R&D teams in Iran. *Technology Analysis and Strategic Management*, *28*(1), 96–113. https://doi.org/10.1080/09537325.2015.1072622

Alavi, M., & Leidner, D. E. (2001). Review: Knowledge management and knowledge management systems: Conceptual foundations and research issues. *MIS Quarterly: Management Information Systems*, *25*(1), 107–136. https://doi.org/10.2307/3250961

Alegre, J., Sengupta, K., & Lapiedra, R. (2013). Knowledge management and innovation performance in a high-tech SMEs industry. *International Small Business Journal*, *31*(4), 454–470.https://doi.org/10.1177/0266242611417472

Alshammary, F. M., & Ali, D. A. (2024). Role of knowledge management process in fostering Employee performance: Assessing the moderating effect of smart technologies. *International Journal of Religion*, *5*(3), 111–127. https://doi.org/10.61707/nejef243

Asrar-ul-Haq, M., & Anwar, S. (2016). A systematic review of knowledge management and knowledge sharing: Trends, issues, and challenges. *Cogent Business and Management*, *3*(1), 0–17. https://doi.org/10.1080/233119744

Barbier, L., & Tengeh, R. (2022). Factors influencing the implementation of knowledge management in the South African government. *International Journal of Research in Business and Social Science (2147- 4478)*, *11*(7), 47–61. https://doi.org/10.20525/ijrbs.v11i7.2035

Boateng, G. O., Neilands, T. B., & Frongillo, E. A. (2018). Best practices for developing and validating scales for health , social, and behavioral research: A primer. *Frotier in Public Health Review*, *6*(June), 1–18. https://doi.org/10.3389/fpubh.2018.00149

Dong, Y., Bartol, K. M., Zhang, Z. X., & Li, C. (2017). Enhancing employee creativity via individual skill development and team knowledge sharing: Influences of dual-focused transformational leadership. *Journal of Organizational Behavior*, *38*(3), 439–458. https://doi.org/10.1002/job.2134

Endende, K. L., Kwasira, J., & Makhamara, F. (2022). Knowledge creation practices and employee performance in selected public technical vocational education and training institutions in Kenya. *European Journal of Human Resource Management Studies*, *6*(1), 34–53. https://doi.org/10.46827/ejhrms.v6i1.1

Fadaie, N., Lakbala, P., & Ghanbarnejad, A. (2023). Impact of knowledge management on job satisfaction and organizational performance among healthcare employees: A structural equation modeling approach. *Health Science Reports*, *6*(9), 1–9. https://doi.org/10.1002/hsr2.1560

Franke, G., & Sarstedt, M. (2019). Heuristics versus statistics in discriminant validity testing: a comparison of four procedures. *Internet Research*, *29*(3), 430–447. https://doi.org/10.1108/IntR-12-2017-0515

Hair, J. F., Hult, G. T. M., Ringle, C. M., Sarstedt, M., Danks, N. P., & Ray, S. (2022). *Partial least squares structural equations*. https://doi.org/10.1007/978-3-030-80519-7_5

Henseler, J., Ringle, C. M., & Sarstedt, M. (2015). A new criterion for assessing discriminant validity in variance-based structural equation modeling. *Journal of the Academy of Marketing Science*, *43*(1), 115–135. https://doi.org/10.1007/s11747-014-0403-8

Marcoulides, K. M., Foldnes, N., & Grønneberg, S. (2019). Assessing model fit in structural equation modeling using appropriate test statistics. *Structural Equation Modeling*, *27*(3), 369–379. https://doi.org/10.1080/10705511.2019.1647785

Masadeh, R., Almajali, D. A., Alrowwad, A., & Obeidat, B. (2019). The role of knowledge management infrastructure in enhancing job satisfaction: A developing country perspective. *Interdisciplinary Journal of Information, Knowledge, and Management*, *14*(January), 1–

25. https://doi.org/10.28945/4169

Muhidin, S. A., Hufad, A., Sutarni, N., Islamy, F. J., Rasto, R., & Inayati, T. (2022). Knowledge management and job performance in higher education: The role of leadership and organizational culture. *AL-ISHLAH: Jurnal Pendidikan*, *14*(4), 5155–5168. https://doi.org/10.35445/alishlah.v14i4.1765

Orzano, A. J., McInerney, C. R., Scharf, D., Tallia, A. F., & Crabtree, B. F. (2007). A knowledge management model: Implications for enhancing quality in health care. *Journal of the American Society for Information Science and Technology*, *59*(3), 489–505. https://doi.org/10.1002/asi.20763

Salmerón, R., García, C. B., and García, J. (2018). Variance inflation factor and condition number in multiple linear regression. *Journal of Statistical Computation and Simulation*, *88*(360), 2365–2384. https://doi.org/10.1080/00949655.2018.1463376

Sarstedt, M., Ringle, C. M., & Hair, J. F. (2020). Handbook of market research. In *Handbook of Market Research* (Issue July). https://doi.org/10.1007/978-3-319-05542-8

Shrestha, N. (2020). Detecting multicollinearity in regression analysis. *American Journal of Applied Mathematics and Statistics*, *8*(2), 39–42. https://doi.org/10.12691/ajams-8-2-1

Sinaga, S. P. H., Maulina, E., Tresna, P. W.,

Sukoco, I., Purnomo, M., & Kostini, N. (2020). Knowledge management and employee performance: A systematic literature review. *Russian Journal of Agricultural and Socio-Economic Sciences*, *101*(5), 150–159. https://doi.org/10.18551/rjoas.2020-05.16

Ştefan, S. C., Popa, I., Olariu, A. A., Popa, Ş. C., & Popa, C. F. (2024). Knowledge management–performance nexus: Mediating effect of motivation and innovation. *Business Process Management Journal*, *30*(8), 27–48. https://doi.org/10.1108/BPMJ-07-2023-0537

Tekle, K. (2024). Role of knowledge management practices in enhancing innovation and competitiveness in the Ethiopian leather industry. *African Journal of Information and Knowledge Management*, *3*(1), 26–39. https://doi.org/10.47604/ajikm.2428

Tohidinia, Z., & Mosakhani, M. (2010). Knowledge sharing behaviour and its predictors. *Industrial Management and Data Systems*, *110*(4), 611–631. https://doi.org/10.1108/02635571011039052

Wah, N. K. (2023). Assumptions for structure equation modeling (SEM), normality of data distribution analysis & model fit measures. *Journal of Clinical Epidemiology & Toxicology*, *4*(2), 1–5. https://doi.org/10.47363/jcet/2023(4)135