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The Influence of Knowledge Management and Soft Skills Development on Employee Perfomance in Public Works Agency

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ABSTRACT

This study examines the influence of knowledge management and soft skills development on employee performance within the Public Works Agency in Indonesia. In today's globalized and technologically advanced environment, employee performance is critical for organizational success. The research highlights that performance is no longer determined solely by technical abilities but also by the effective management of knowledge and the development of interpersonal competencies. Using a quantitative research design, data were collected from 215 respondents through a structured questionnaire and analyzed using multiple linear regression. The findings reveal that both knowledge management and soft skills development have a positive and significant effect on employee performance. Knowledge management through technology, procedures, and personal knowledge enables employees to access information efficiently and make informed decisions, thereby enhancing productivity. Similarly, soft skills such as communication, teamwork, ethical responsibility, and leadership are shown to improve collaboration and adaptability in the workplace. The statistical analysis, including t-tests, supports both hypotheses, indicating strong correlations between the independent variables and performance outcomes. The study concludes that effective knowledge management systems and soft skills training contribute substantially to achieving organizational goals.

Keywords *Knowledge Management, Soft Skills Development, Employee Perfomance*

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INTRODUCTION

In the era of globalization, characterized by rapid technological advancements and heightened competition, employee performance emerges as a critical determinant of organizational success (Sundaray et al., 2013). Optimal performance is no longer solely reliant on technical skills but also on employees' ability to manage their knowledge and competencies effectively (Nonaka, 2009). Employees with deep knowledge and relevant skills are better equipped to adapt to innovation, thus making substantial contributions to

organizational growth (Alavi & Leidner, 2001). Organizational agility in responding to technological changes necessitates fostering a culture of continuous learning. A supportive environment enables employees to enhance their knowledge and skills, boosting both individual and collective performance (Garvin et al., 2008). Employee performance, defined as the outcomes achieved by individuals in executing their duties and responsibilities (Armstrong, 2009), is positively influenced by access to organizational knowledge resources (Nonaka, 2009). Continuous development of human capital is essential to cultivate a high-quality workforce (Sundaray et al., 2013).

Soft skills development plays a pivotal role in enhancing employee performance. Employees who are encouraged to learn and grow are more likely to engage in the development of soft skills, such as leadership and teamwork (Boyatzis, 2008). These skills not only improve individual capabilities but also foster team collaboration and organizational synergy (Alavi & Leidner, 2001). Hence, organizations must strategically identify and strengthen factors that influence employee performance, including knowledge management and soft skills development. Knowledge management (KM) refers to the systematic process of creating, sharing, and effectively using organizational knowledge (Davenport et al., 1998). Studies show that effective KM enhances productivity and innovation, ultimately improving employee performance (Wang, 2003). In the digital era, robust knowledge systems—such as databases and digital platforms—ensure accessible and well-organized information, reducing inefficiencies and enhancing decision-making processes (Alavi & Leidner, 2001; Gold et al., 2001).

Simultaneously, soft skills development, which includes competencies related to interpersonal communication, emotional intelligence, and adaptability, is vital in dynamic work environments. Employees with strong soft skills can collaborate, resolve conflicts, and respond to change effectively (Boyatzis, 2008; Musheke & Phiri, 2021). This adaptability enhances creative problem-solving and fosters organizational resilience (Collins, 2001; Robles, 2012). Despite the recognized importance of KM and soft skills, many organizations still underutilize these elements in human resource development strategies (Ulrich, 2015). In public institutions such as the Department of Public Works (PU), the complexity of infrastructure projects demands high adaptability and collaboration among employees (Noe, 2020). The PU, responsible for planning and maintaining infrastructure (Iptek & Lipi, 2015), employs digital systems like SIMANTU to streamline knowledge management (Antoro, 2019).

Although SIMANTU facilitates knowledge sharing and access, its underutilization due to insufficient employee understanding poses a barrier to optimal performance (Dienaputra, 2022). Continuous training and mentorship, particularly involving experienced staff sharing practical knowledge, are crucial for bridging this gap (Hegazy & Ghorab, 2015; Anwar, 2020). The PU's commitment to developing its workforce through seminars and discussions—such as those on women's leadership in infrastructure—demonstrates a strategic focus on enhancing soft skills. Given the increasing demand for high-performing public sector employees, this study explores the impact of knowledge management and soft skills development on employee performance in the PU. By identifying effective development models, the research aims to enhance workforce competencies, thereby contributing to the successful implementation of infrastructure projects (Jarrahi et al., 2023; Ginting et al., 2020).

RESEARCH METHOD

Research Design

This study employs a quantitative research design, which involves the systematic collection and analysis of numerical data to test hypotheses and examine relationships between variables. Quantitative research typically utilizes surveys and interviews as primary data collection tools. In this study, multiple regression analysis is applied to assess the simultaneous effect of two independent variables—knowledge management and soft skills development—on the dependent variable, employee performance. This method allows for the evaluation of each factor's contribution to performance outcomes, aligning with the study's objectives (Sekaran & Bougie, 2016).

Data Sources and Data Collection Techniques

Data sources play a crucial role in ensuring the validity and reliability of research outcomes. Researchers must consider various factors, including data collection and processing methods, to maintain high-quality data (Sekaran & Bougie, 2016). This study utilizes primary data obtained directly from respondents through observation, offering reliable insights relevant to the research problem. The primary data collection technique employed is a questionnaire, which consists of written statements provided to respondents to elicit accurate and relevant information. The questionnaire functions as a survey tool, enabling the systematic gathering of data aligned with the study's objectives (Sekaran & Bougie, 2016).

Population and Sample

A population encompasses all individuals or objects possessing specific characteristics relevant to the research problem (Sekaran & Bougie, 2016). In this study, the population consists of 21,798 civil servants working in the Public Works sector across 34 provinces in Indonesia, as detailed in the employee recap data. To ensure that the sample accurately represents the population, the researcher adopted a survey-based approach. The sampling method used is probability sampling with the stratified random sampling technique, which divides the population into several strata based on specific characteristics, followed by random selection from each stratum. The sample size was determined using the formula proposed by Hair et al. (2018), which recommends multiplying the number of measurement items by a factor ranging from 5 to 10. Given that this study includes 43 measurement items, the appropriate sample size is calculated as 43 × 5, resulting in 215 respondents as the final sample for the research.

Operational Definition and Measurement of Variables

Operational definitions are essential in transforming abstract concepts into measurable variables, enabling researchers to collect data systematically (Sekaran & Bougie, 2016). In this study, the independent variables include Knowledge Management (X1) and Soft Skills Development (X2), while the dependent variable is Employee Performance (Y). Each variable is defined and measured using specific indicators with a Likert scale.

Table 1.
Operational Definitions and Measurement

Variable	Operational Definition	Indicators
Knowledge Management	A systematic process for managing IT and knowledge in organizations for effective use (Jarrahi et al., 2023).	1. Technology 2. Procedure 3. Personal knowledge
Soft Skills Development	The process of enhancing interpersonal and intrapersonal abilities in the workplace (Ginting et al., 2020).	1. Teamwork 2. Communication 3. Ethical responsibility 4. Leadership
Employee Performance	The degree of effectiveness in executing job tasks and responsibilities (Dawanaka et al., 2022).	1. Quality 2. Quantity 3. Timeliness 4. Effectiveness 5. Independence

The measurement uses a Likert scale, which evaluates attitudes, opinions, or behaviors with a set of response options (Dillman et al., 2014).

Table 2.
Scoring Scale

Response	Code	Score
Strongly Agree	SS	5
Agree	S	4
Neutral	N	3
Disagree	TS	2
Strongly Disagree	STS	1

The scale range is calculated as (highest value – lowest value) ÷ number of categories, yielding the interpretation:

1.00–1.80 = Very Poor, 1.81–2.60 = Poor, 2.61–3.40 = Fair, 3.41–4.20 = Good, 4.21–5.00 = Very Good (Sekaran & Bougie, 2016).

Data Analysis

Instrument testing is a crucial procedure to ensure that the tools used for data collection accurately measure the intended research variables (Sekaran & Bougie, 2016). In this study, SPSS version 26 was utilized to perform both validity and reliability assessments (Creswell, 2017). Validity was examined using Confirmatory Factor Analysis (CFA), where indicators were considered valid if the Kaiser-Meyer-Olkin (KMO) Measure of Sampling Adequacy exceeded 0.50, Anti-Image Correlation values were above 0.50, and factor loadings were greater than 0.50 and clustered within the same factor (Hair et al., 2018). Reliability was tested using Cronbach's Alpha, with values above 0.60 indicating that the instrument produced consistent results and was therefore considered reliable (Tavakol & Dennick, 2011; Sugiyono, 2009). Furthermore, the Kolmogorov-Smirnov test was used to assess the normality of data distribution; if the significance value exceeded 0.05, the data were deemed normally distributed, while values below 0.05 indicated a non-normal distribution (Ghozali, 2016).

Multiple linear regression analysis was used to examine the relationship between the independent variables—knowledge management and soft skills development—and employee performance (Sekaran & Bougie, 2016). Hypothesis testing was conducted using a t-test. If the calculated t-value exceeds the t-table value, the null hypothesis (H_0) is rejected, indicating a significant influence of the independent variable (Runger, 2010; Sekaran & Bougie, 2016).

RESULT AND DISCUSSION

Respondent Characteristics

The questionnaire distribution process for this study was conducted on February 3, 2025, using Google Forms, which were shared through Instagram. A total of 215 questionnaires were distributed to employees of the Department of Public Works (Pekerjaan Umum/PU), and all were successfully returned and could be processed. This resulted in a 100% response rate, indicating strong participation and data completeness from the targeted respondents.

Respondent characteristics were analyzed to understand the diversity based on gender, age, work tenure, and island of origin. In terms of gender, the sample consisted of 133 male employees (61.9%) and 82 female employees (38.1%), showing a male-dominated workforce. Regarding age, most respondents were between 21 and 30 years old (40.5%), followed by those aged 31 to 40 (30.2%), and those over 40 (29.3%). In terms of work experience, the majority had been employed for 5 to 10 years (41.9%), while others had less than 5 years (33.5%) or more than 10 years (24.6%) of experience. Finally, based on regional origin, the largest group of respondents came from Sumatra (27%), followed by Java (22.8%), Sulawesi (16.7%), and Kalimantan (13.9%), with smaller proportions from Papua, Maluku, Nusa Tenggara, and Bali.

Validity and Reliability Test Results

The validity test in this study was conducted using SPSS version 26 and applied Confirmatory Factor Analysis (CFA). The criteria for a valid instrument were based on the guidelines by Hair et al. (2018), which require that the values of the Kaiser-Meyer-Olkin Measure of Sampling Adequacy (KMO MSA), anti-image correlations, and factor loadings exceed 0.50. The analysis covered three main variables: knowledge management (X1), soft skills development (X2), and employee performance (Y). All indicators across the three variables met the minimum threshold, indicating that each item is valid and effectively measures the intended construct. This confirms that the instrument used in the research has strong construct validity and the indicators accurately represent the conceptual variables examined in the study.

In addition to validity testing, a reliability test was conducted using Cronbach's Alpha to assess the internal consistency of the questionnaire items. According to Ghozali (2011), a Cronbach's Alpha value greater than 0.60 indicates that a variable is considered reliable. The results of the reliability test for each variable are presented in the following table:

Table 3.
Reliability Test Results

Variable	Cronbach Alpha	N of Item	Description
Knowledge Management (X1)	0.795	13	Reliable
Soft Skills Development (X2)	0.671	12	Reliable
Employee Performance (Y)	0.787	18	Reliable

Based on the table above, all variables showed Cronbach's Alpha values above 0.60, confirming that the questionnaire items are consistent and reliable for repeated measurements.

Analysis of Respondent Statement Descriptions

The analysis of respondents' answers reveals that the implementation of knowledge management within the Public Works (PU) institution is considered optimal. This is evidenced by the average score of 4.09 for the knowledge management variable (X1), indicating a high category. Respondents showed a strong ability to utilize technology, access and share knowledge, and contribute to long-term strategic efforts. The highest rated statement was related to the ease of using technology in daily work, suggesting that digital tools are well integrated and support employee performance. Conversely, the lowest rated item pertained to formulating long-term visions and missions, reflecting that strategic planning is typically the responsibility of upper management rather than all staff.

Regarding soft skills development (X2), the average response score was 4.07, also falling within the high category. This suggests that the work environment within the PU institution has effectively supported the enhancement of soft skills such as collaboration, communication, ethical reasoning, and adaptability. The highest score was given to the statement on teamwork, highlighting that collaborative culture is well established. The lowest score was found in relation to making difficult decisions from multiple perspectives, indicating that such responsibilities are often limited to managerial roles, and not all employees are expected to engage in complex decision-making processes.

For employee performance (Y), the average score reached 4.11, reflecting that overall job performance among employees is perceived to be at a high level. Respondents reported confidence in meeting targets, managing time effectively, and performing duties with consistency and independence. The highest scoring item was the ability to fulfill work responsibilities according to set targets, reflecting a strong sense of accountability and goal orientation. However, the lowest score suggested some employees may prioritize

completing tasks on time over ensuring top-quality outcomes, pointing to a potential area for performance quality improvement.

Normality Test Results

The normality test in this study was conducted using SPSS version 26 with the Kolmogorov-Smirnov non-parametric test. According to the results, if the significance probability is greater than 0.05, the data is normally distributed; if it is less than 0.05, the data is not normally distributed (Ghozali, 2016). The Kolmogorov-Smirnov test results showed a significance value of 0.200, which is greater than 0.05, indicating that the data follows a normal distribution. Therefore, it can be concluded that the data used in this study is normally distributed.

Multiple Linear Regression Analysis Results

The multiple linear regression analysis in this study was conducted using SPSS version 26 to examine the influence of knowledge management and soft skills development on employee performance. The regression equation derived from the analysis is as follows:

$Y=29.913+0.356X1+0.511X2Y = 29.913 + 0.356X1 + 0.511X2$

Where:

- Y represents employee performance,
- X1 represents knowledge management,
- X2 represents soft skills development.

Table 4.
Multiple Linear Regression Analysis Results

Model	Unstandardized Coefficients	Standardized Coefficients	t	Sig.
	B	Std. Error	Beta	
(Constant)	29.913	4.226		7.078
Knowledge Management	0.356	0.076	0.317	4.665
Soft Skills Development	0.511	0.100	0.345	5.089

Additionally, the t-test was used to assess the significance of the variables. For knowledge management (X1), the t-value was 8.755, which is greater than the critical t-value of 1.652, indicating a positive and significant impact on employee performance. Similarly, for soft skills development (X2), the t-value was 9.043, also exceeding the critical t-value, confirming a positive and significant influence on employee performance.

T-Test Results

This table presents the coefficients and significance values for both knowledge management and soft skills development in relation to employee performance. The t-values for both variables (8.755 for Knowledge Management and 9.043 for Soft Skills Development) exceed the critical value of 1.652, indicating that both variables have a positive and significant impact on employee performance.

The purpose of the Results and Discussion is to state your findings and make interpretations and/or opinions, explain the implications of your findings, and make suggestions for future research. Its main function is to answer the questions posed in the Introduction, explain how the results support the answers and, how the answers fit in with existing knowledge on the topic.

Table 6.
Results of t-test for Knowledge Management and Soft Skills Development

Model	Unstandardized Coefficients	Standardized Coefficients	t	Sig.
	B	Std. Error	Beta	
(Constant)	43.021	3.541		12.150
Knowledge Management (X1)	0.578	0.066	0.514	8.755
Soft Skills Development (X2)	0.780	0.086	0.527	9.043

The Effect of Knowledge Management on Employee Performance

The findings of this study support the first hypothesis, indicating that knowledge management has a positive and significant impact on employee performance. This positive effect suggests that better implementation of knowledge management leads to improved employee performance, encompassing quantity, quality, and effectiveness. Consequently, the study aligns with the hypothesis proposed. Respondent statements showing the highest mean, indicate that employees in the public works (PU) agency are proficient in using technology effectively in their work. Employees in the PU agency are capable of performing tasks according to the established targets. This highlights that technological proficiency plays a crucial role in performance achievement. The better employees are at using technology, the greater the likelihood they will complete tasks on time and meet predetermined targets.

These findings align with Aghaeipour et al. (2014), who argue that knowledge management significantly impacts employee performance, including work quantity, quality, and target achievement. The efficient

implementation of knowledge management systems allows employees to easily access information and accelerate decision-making processes (Nonaka, 2009). Moreover, Aghaeipour et al. (2024) further strengthen the result, emphasizing that effective knowledge management increases employee performance. Thus, organizations should focus on developing and implementing effective knowledge management systems to ensure sustained employee performance and contribute to long-term success.

The Effect of Soft Skills Development on Employee Performance

The results of this study support the second hypothesis, indicating that the development of soft skills has a positive and significant effect on employee performance. This positive impact suggests that the better the soft skills development received by employees, the more satisfied their performance will be in the workplace. In other words, the more effective the training and development of soft skills given to employees, the more optimal their daily work outcomes, thus supporting the proposed hypothesis. Respondent statements with the highest mean, reveal that employees in the public works (PU) agency are capable of collaborating well within a team. Employees at PU can perform tasks in alignment with predetermined targets. This highlights that collaboration is a key driver for achieving successful employee performance targets.

These findings align with Marsha (2024), who argues that soft skills positively and significantly impact employee performance, including communication abilities, teamwork, ethical responsibility, and leadership in task execution. Employees with strong soft skills are more effective, productive, and able to meet set targets, ensuring sustained performance improvement and supporting long-term organizational success (Musheke & Phiri, 2021). Furthermore, the research emphasizes that optimal soft skills development helps employees navigate challenges and adapt to workplace changes, enhancing their contributions to company goals (Marsha, 2024).

CONCLUSION

Based on the results of the research on the influence of knowledge management and soft skills development on employee performance at the Public Works (PU) agency, the study concludes that both variables have a positive and significant impact on employee performance. Specifically, knowledge management significantly enhances employee performance at PU, and the development of soft skills also contributes positively to employee outcomes. This supports the hypotheses proposed in the study, confirming the

importance of effective knowledge management and soft skills development in improving employee performance.

Several recommendations can be made from these findings. First, it is suggested that the Public Works agency optimize the implementation of knowledge management and soft skills development in a systematic and comprehensive manner. This approach will help create a work environment that fosters employee competence growth. Second, employees at PU should continue to actively engage in self-development and participate in various activities within the workplace. This will help broaden their professional and personal horizons. Lastly, future researchers are encouraged to further explore the findings of this study by investigating the influence of knowledge management and soft skills development on employee performance, which could provide new insights and contribute to the body of knowledge in this field.

REFERENCES

Aghaeipour, Y., Bakhtazma, A., Shafizadeh, D., Malekara, A., & Hasanpour, H. (2024). *Analysis of the Success Factors of a Knowledge Management Model Based on Artificial Intelligence in Organizational Creativity and Innovation of Iran Khodro Industrial Group*.

Alavi, & Leidner. (2001). Knowledge Management and Knowledge Management Systems : Conceptual Foundations and Research Issues By Maryam Alavi Orkand Professor of Information Systems Robert H . Smith School of Business University of Maryland College Park , MD 20742 and Boulevard de. *MIS Quarterly*, 107–136.

Antoro, T. (2019). *Aplikasi SIMANTU Sajikan Informasi Pembangunan Infrastruktur*.

Anwar. (2020). *PELATIHAN PENGEMBANGAN SDM UNTUK MENDAPATKAN TENAGA KERJA YANG BAIK DAN TEPAT*.

Armstrong, M. (2009). *Armstrong's Handbook of Performance Management: An Evidence-Based Guide to Performance Leadership* (p. 281). https://books.google.com/books?hl=en&lr=&id=ADpUEAAAQBAJ&oi=fnd&pg=PP1&dq=talent+management+organization+performance&ots=uFFv4qJ1Dw&sig=W5rqlY-_SYrfh-tS2RkEEiMd2n8

Boyatzis, R. E. (2008). Competencies in the 21st century. *Journal of Management Development*, *27*(1), 5–12. https://doi.org/10.1108/02621710810840730

Collins, J. (2001). *Good to Great Fast Company*. *October*.

Creswell, John W., and J. D. C. (2017). Research Design: Qualitative, Quantitative, and Mixed Methods Approaches. *Awkward Dominion*, 381–382. https://doi.org/10.7591/9781501721144-016

Dawanaka, Y., Waworundeng, W., & Purwanto, A. (2022). Employee Performance in Improving Population Administration Services in the Population and Civil Registration Office of East Halmahera Regency. *Journal La Bisecoman*, *3*(6), 271–277. https://doi.org/10.37899/journallabisecoman.v3i6.928

Dienaputra, R. A. (2022). *Kementerian PUPR Dorong Pembangunan Infrastruktur untuk Pertumbuhan dan Pemerataan Ekonomi*.

Dillman, D. A., Smyth, J. D., & Christian, L. M. (2014). *Mixed-Mode Surveys: The Tailored Design Method*.

Garvin, D. A., Gino, F., & Edmondson, A. C. (2008). Is Yours a Learning Organization? Teaming facing dynamic conditions View project Building the future-how cross-industry teaming works View project. *Harvard Business Review*, *April*, 1–10. https://www.researchgate.net/publication/5440662

Ginting, H., Mahiranissa, A., Bekti, R., & Febriansyah, H. (2020). The effect of outing Team Building training on soft skills among MBA students. *International Journal of Management Education*, *18*(3), 100423. https://doi.org/10.1016/j.ijme.2020.100423

Gold, A. H., Malhotra, A., & Segars, A. H. (2001). Knowledge Management: An Organizational Capabilities Perspective. *Chemical Engineering and Technology*, *34*(5), 688–698. https://doi.org/10.1002/ceat.201000522

Hair, et al. (2018). *Correlation Coefficients: Appropriate Use and Interpretation*. *126*(5), 1763–1768. https://doi.org/10.1213/ANE.0000000000002864

Iptek, J., & Lipi, R. (2015). *RENCANA STRATEGIS KEMENTERIAN PEKERJAAN UMUM DAN PERUMAHAN RAKYA*. 1–6. https://doi.org/351.077 Ind r

Jarrahi, M. H., Askay, D., Eshraghi, A., & Smith, P. (2023). Artificial intelligence and knowledge management: A partnership between human and AI. *Business Horizons*, *66*(1), 87–99. https://doi.org/10.1016/j.bushor.2022.03.002

Musheke, M. M., & Phiri, J. (2021). Effective communication and teamwork promotes patient safety. *Nursing Standard (Royal College of Nursing (Great Britain) : 1987)*, *29*(49), 50–57. https://doi.org/10.7748/ns.29.49.50.e10042

Noe, R. A. (2020). *Employee Training and Development*.

Nonaka, I. (2009). *The Knowledge-Creating Company*.

Robles, M. M. (2012). Executive Perceptions of the Top 10 Soft Skills Needed in Today's Workplace. *Business Communication Quarterly*, *75*(4), 453–465. https://doi.org/10.1177/1080569912460400

Runger, M. &. (2010). Applied Statistics and Probability for Engineers. In *European Journal of Engineering Education* (Vol. 19, Issue 4, pp. 516–517). https://doi.org/10.1080/03043799408928312

Sekaran, & Bougie. (2016). Research Methods for Business: A Skill-Building Approach. *Leadership & Organization Development Journal*, *34*(7), 700–701. https://doi.org/10.1108/lodj-06-2013-0079

Sundaray, B. K., Sahoo, C. K., & Tripathy, S. K. (2013). *Impact of human resource interventions on quality of work life: An exploration. International employment relations review* (Vol. 19, p. 68).

Tavakol, M., & Dennick, R. (2011). Making sense of Cronbach's alpha. *International Journal of Medical Education*, *2*, 53–55. https://doi.org/10.5116/ijme.4dfb.8dfd

Thomas Davenport, B. H., Prusak, L., & Webber, --Alan. (1998). *Invitation Send a Comment Submit an Article Subscribe Working Knowledge: How Organizations Manage What They Know*. 1–15. http://www.acm.org/ubiquity/book/t_davenport_1.html