

Knowledge, Innovative Work Behavior, Work Culture on HR Performance

Mohammad Reza Irfani¹⁾ & Lutfi Nurcholis²⁾

¹⁾Faculty of Economy, Universitas Islam Sultan Agung (UNISSULA) Semarang, Indonesia, E-mail: mohammadrezairfani.std@unissula.ac.id

²⁾Faculty of Economy, Universitas Islam Sultan Agung (UNISSULA) Semarang, Indonesia, E-mail: lutfinurcholis@unissula.ac.id

Abstract. *This study aims to analyze the effect of knowledge quality on innovative work behavior and human resource (HR) performance, as well as the effect of innovative work behavior on HR performance at the Customs and Excise Supervision and Service Office Type Madya Pabean A Semarang. This research uses an associative explanatory design with a quantitative approach. The population consists of all civil servants and non-civil servants totaling 203 employees, with a sample of 135 respondents determined using the Slovin formula. The sampling technique employed is non-probability sampling with convenience sampling. Data were collected using closed-ended questionnaires with a Likert scale of 1–5, covering knowledge quality, innovative work behavior, and HR performance variables. Data analysis was conducted using Partial Least Square (PLS). The results indicate that knowledge quality has a significant effect on innovative work behavior, knowledge quality has a significant effect on HR performance, and innovative work behavior has a significant effect on HR performance. These findings suggest that effective knowledge management encourages innovative behavior and improves employee performance. Therefore, organizations are recommended to strengthen knowledge management systems and promote an innovation-oriented culture to enhance HR performance sustainably.*

Keywords: Behavior; Innovative; Knowledge; Quality.

1. Introduction

Rapid digital change across various sectors has had a significant impact, including on the customs and excise sector, which now faces significant challenges in adapting to technological advancements. At the Directorate of Customs and Excise, the development of customs and excise regulations has become increasingly complex, as the implementation of digital systems impacts administrative and supervisory processes at every level. The implementation of more advanced digital technology requires a more efficient, transparent, and accessible system. Therefore, these changes require rapid adaptation in terms of regulations and human resource (HR) training.

One of the main challenges facing human resources in the Directorate of Customs and Excise is the need to master new technologies used in customs and excise processes. The ever-evolving digital system demands advanced technical skills, ranging from the use of software for reporting and monitoring to online transaction oversight. Furthermore, developing regulations in line with digital technology requires a deep understanding of the legal aspects and new policies related to the use of technology in customs operations.

The quality of knowledge is a key factor in determining organizational performance. (Waheed & Kaur, 2016) High-quality knowledge that is relevant to current developments allows employees to adapt quickly, increase work efficiency, and provide the best service to the public and business actors. (Corral de Zubielqui et al., 2019).

The relevance of knowledge to current developments is very important, especially in terms of adapting to technological changes, such as the use of blockchain technology and the Internet of Things (IoT), as well as changes in global regulations and policies. (Tseng, 2016) Up-to-date knowledge helps employees make informed decisions, increases innovation and work efficiency, and provides better public services. (Lodhi et al., 2017).

In addition, quality knowledge plays an important role in improving analytical skills and problem-solving abilities, which are the main components of professional competence. (Han et al., 2018) These skills help employees analyze complex information, anticipate potential problems, and formulate appropriate and efficient solutions, thereby strengthening the organization's capacity to provide optimal service.

Previous research on the role of knowledge in performance remains controversial. Among these is the research that states that knowledge is essentially...does not have a significant impact on performance, because some knowledge cannot be easily shared (Manaf et al., 2018) but other studies state that knowledge has a positive and significant impact on the performance of the public sector in the UAE (Al Ahbabi et al., 2019).

Knowledge is not the only aspect that influences service performance, however, the ability to continuously produce innovation in products, services and work processes is also a crucial aspect for an organization.(Prakash, 2019).Jong & Hartog (2008)defines Innovative Work Behavior as individual behavior that aims to initiate and intentionally introduce (in a work role, group, or organization) new and useful ideas, processes, products, or procedures.

Innovative work behavior refers to employees' ability and desire to generate new ideas, more efficient work methods, and creative solutions to various problems. Meanwhile, an initiative climate describes a work environment in which employees are encouraged and empowered to take initiative, dare to try new things, and actively participate in the decision-making process.

2. Research Methods

The type of research used is associative explanatory research, which aims to determine the relationship between two or more variables (Sugiyono, 2012). This research aims to explain testing hypothesis with the aim of confirming or strengthening the hypothesis with the hope of strengthening the theory used foundation. In this case it is quality of knowledge; work behavior and HR performance. The data collection method in this study was carried out in several ways as follows: Primary Data In this study, primary data was obtained from questionnaire, namely a data collection method carried out by handing out a questionnaire containing a list of questions to respondents related to the statement in the research variable, namely quality of knowledge; work behavior and HR performance. The variables in this study were measured using personal questionnaires (Personality Questionnaires). Data collection was conducted using a closed-ended questionnaire. The statement intervals in this study were 1–5, with anchor statements ranging from Strongly Disagree (SD) to Strongly Agree (SA). Secondary Data Secondary data is data obtained indirectly related to research results. Secondary data is data that has been processed by other people or institutions and published (Widodo, 2014). This data was obtained from literature related to this study.

3. Results and Discussion

3.1. Respondent Description

This study used 135 respondents from the Semarang Type A Customs and Excise Supervision and Service Office. The selected respondents were employees with a minimum of 5 years of work experience. The characteristics of the research respondents are presented with statistical data obtained through questionnaire distribution. In the field implementation, all respondents were willing to fill out the questionnaire, so that the results of the study obtained 135 research questionnaires that were completely filled out and could be used in the data analysis of this study. The results of the questionnaire data processing related to the description of the respondents are presented below.

1) Gender

The characteristics of respondents analyzed in this study can be identified based on gender as follows:

Respondent Description Table by Gender

Gender	Frequency	Percentage
Man	94	69.6
Woman	41	30.4
Total	135	100.0

Source: Data processing results, 2025.

The table above shows that 94 respondents (69.6%) were male, while 41 respondents (30.4%) were female. This composition reflects the general characteristics of customs

agencies, which structurally and operationally assign many male personnel to technical and field functions. Male dominance in the HR structure can impact performance dynamics, particularly related to physical aspects, mobility, and the relatively high operational workload. However, the presence of female employees, who make up nearly a third of the population, continues to make important contributions, particularly in administrative functions, data analysis, and customs services that require high accuracy.

2) Age

The characteristics of the respondents analyzed in this study can be identified based on age level as follows:

Respondent Description Table by Age

Age	Frequency	Percentage
21 - 30 years old	49	36.3
31 - 40 years old	54	40.0
41 - 50 years old	21	15.6
51 - 60 years	11	8.1
Total	135	100.0

Source: Data processing results, 2025.

The data presented in the table shows that in terms of age, the majority of respondents are in the 31–40 year range with a total of 54 respondents (40.0%), followed by the 21–30 year age group with 49 respondents (36.3%). The 41–50 year age group has 21 respondents (15.6%), while the 51–60 year age group has only 11 respondents (8.1%). This composition indicates that human resources are dominated by productive age employees who are at the peak phase of work capabilities, both physically, cognitively, and innovatively. The dominance of productive age has positive implications for organizational performance, especially because this group tends to be adaptive to technology, responsive to regulatory changes, and has high energy in carrying out dynamic customs operational tasks.

3) Last education

The characteristics of the respondents analyzed in this study can be identified based on their last education as follows:

Respondent Description Table According to Last Education

Education	Frequency	Percentage
High School/Vocational School	5	3.7
Diploma	45	33.3
S1	70	51.9
S2	15	11.1
Total	135	100.0

Source: Data processing results, 2025.

Based on the table above, it can be seen that based on educational level, the majority of respondents had a bachelor's degree (70 respondents (51.9%)), followed by a diploma (45

respondents (33.3%) and a master's degree (11.1%). Only 5 respondents (3.7%) had a high school/vocational school education. The dominance of higher education graduates indicates a good intellectual capacity of human resources in understanding customs regulations, technical procedures, and risk analysis. A relatively high level of education also has the potential to improve the quality of decision-making and problem-solving skills, which are highly relevant in the complex and ever-changing Customs and Excise work environment. This is crucial capital in encouraging improvements in the quality of knowledge and work innovation.

4) Years of service

The characteristics of the respondents analyzed in this study can be identified based on the length of time they have worked as follows:

Respondent Description Table According to Length of Service

Years of service	Frequency	Percentage
0 - 10 years	62	45.9
11 - 20 years	48	35.6
21 - 30 years old	18	13.3
> 30 years	7	5.2
Total	135	100.0

Source: Primary Data Processing Results, 2025.

The table shows that in terms of length of service, the majority of respondents were in the 0–10 years category, with 62 respondents (45.9%), followed by 11–20 years with 48 respondents (35.6%). Respondents with 21–30 years of service numbered 18 respondents (13.3%), while only 7 respondents (5.2%) had worked for more than 30 years. This indicates that the composition of human resources tends to be dominated by employees with intermediate work experience who have adequate operational understanding while still being adaptive to innovation and digitalization of customs processes. This relatively even length of service also indicates that the combination of experienced and new generation human resources can create productive work collaboration, especially in terms of knowledge transfer, competency strengthening, and the implementation of more effective work procedures.

Descriptive analysis aims to obtain an overview of respondents' assessments of the variables being studied. Descriptive analysis provides information about respondents' tendencies in responding to the indicator items used to measure the research variables.

The data is described by assigning a weighting to each statement in the questionnaire. Respondent response criteria follow the following rating scale: Strongly Agree (SS) score 5, Agree (S) score 4, Somewhat Agree (CS) score 3, Disagree (TS) score 2, Strongly Disagree (STS) score 1. Next, the data will be categorized into three groups using this scale. To determine the scoring criteria for each group, the calculation can be done as follows: (Sugiyono, 2017):

Highest score = 5

Lowest score = 1

Range = Highest score – lowest score = 5 - 1 = 4

Class interval = Range / number of categories = 4/3 = 1.33

Based on the size of the class interval, the criteria for the three categories are: low category, score = 1.00 – 2.33, medium category, score = 2.34 – 3.66 and high/good category, with a score of 3.67 – 5.00. A complete description of each variable is presented below:

TaResearch Variable Description bell

No	Variables and indicators	Mean	Standard Deviation
1	Quality of knowledge	4.06	
	a. Accuracy	4.12	0.91
	b. Completeness	4.07	0.93
	c. Punctuality,	4.04	0.94
	d. Relevance of information	4.01	0.92
2	Innovative work behavior	4.21	
	a. Innovation in IT utilization	4.24	0.80
	b. problem identification,	4.23	0.76
	c. idea generation,	4.16	0.73
	d. promotion,	4.21	0.79
	e. realization.	4.19	0.78
3	HR Performance	4.21	
	a. quality,	4.30	0.75
	b. quantity,	4.17	0.71
	c. the need for supervision,	4.19	0.71
	d. interpersonal influence	4.18	0.78

The table shows that Knowledge Quality has a mean value in the high category, namely 4.06. This result indicates that the knowledge possessed by HR is good in terms of accuracy, completeness, timeliness, and relevance of information, thus supporting the organization's work processes effectively. The indicator with the highest value is Accuracy with a mean of 4.12 (high category), which indicates that HR is able to present information accurately and with minimal errors. The indicator with the lowest value is Information Relevance with a mean of 4.01, but still in the high category. This indicates that although the relevance of information is still good, there is room for improvement to make the information provided more appropriate to the work context and organizational needs. Overall, all indicators show a consistently good condition of HR knowledge across various aspects.

The Innovative Work Behavior variable has an overall average of 4.21, which is in the high category. This indicates that human resources have a strong tendency to display innovative

behavior in their work, both in identifying problems, generating new ideas, promoting ideas, and implementing them. The indicator with the highest score is Innovation in IT Utilization with a mean of 4.24, indicating that the use of information technology is the most dominant aspect in supporting human resource innovative behavior. The indicator with the lowest score is Idea Generation with a mean of 4.16, but still in the high category. This means that the ability to generate new ideas is still good but relatively lower than other innovative aspects and can be a focus for future improvement. Overall, human resource innovative behavior is at a very good level and is an important asset in organizational development.

The HR Performance variable has an overall mean of 4.21, which is in the high category. This indicates that HR is considered capable of achieving good performance standards, both in terms of work quality, quantity, level of independence, and interpersonal skills. The indicator with the highest value is Work Quality with a mean of 4.30, indicating that the work produced by HR has a very good quality standard. The indicator with the lowest value is Work Quantity with a mean of 4.17, although it remains in the high category. This indicates that the volume of work produced is quite good, but still has the potential to be improved to achieve more optimal productivity. Overall, all indicators show that HR performance is at a superior level and serves as a strong foundation for organizational achievements.

Reliability tests are conducted to prove accuracy, consistency and precision. instruments in measuring constructs. Reliability indicates that the research indicators used are in accordance with the actual conditions of the research object. Measuring the reliability test of a construct with reflective indicators can be done using three methods, namely:

- a. *Cronbach alpha*. The Cronbach alpha score criteria of more than 0.70 means that the reliability of the construct being studied is classified as good.(Ghozali, 2014).
- b. *Composite Reliability*. Indicators of a construct give good results, namely if they are able to provide a composite reliability value of more than 0.70.
- c. *Average Variance Extracted(AVE)*. An AVE criterion above 0.5 indicates that the indicators that form the research variables are said to be reliable, so they can be used in further analysis in the research.

The composite reliability, Cronbach's alpha, and AVE values for each construct of this study are presented in full in the table below:

Reliability Test Results Table

	Cronbach's alpha	Composite reliability (rho_c)	Average variance extracted (AVE)
HR Performance	0.893	0.926	0.758
Quality of knowledge	0.974	0.981	0.928
Innovative work behavior	0.928	0.946	0.777

Source: Smart PLS 4.1.0 data processing (2025)

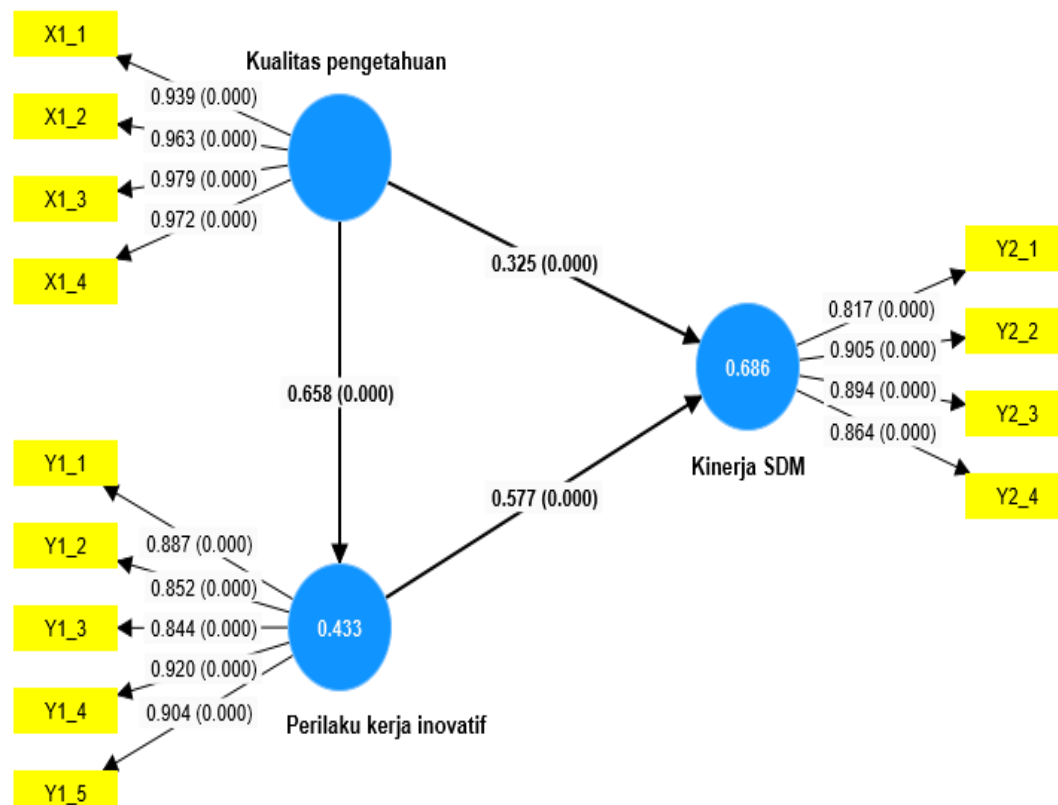
The results of the reliability test for each structure are shown in the table above. The findings indicate that the Cronbach alpha value for each construct is more than 0.7, and the composite reliability value (*Composite reliability*) each construct is more than 0.7, and the AVE value of each construct is more than 0.5. Based on the results of the reliability test, it can be concluded that the research instrument has high reliability.

Based on the results of the convergent validity, discriminant validity, and reliability tests of the research variables, the conclusion that can be drawn is that the indicators used in measuring the latent variables can all be stated as valid and reliable measurement indicators.

3.2. Structural Model Evaluation (Inner Model)

The final analysis in PLS is the structural model analysis, or inner model. In structural model analysis, hypotheses can be tested using t-statistics. The test results can be seen from the structural model output, which examines the significance of the loading factor, which explains the influence of the knowledge quality construct on HR performance through the mediation of innovative work behavior as an intervening variable.

In this case, data processing was performed using SmartPLS v4.1.0 software. The results of this data processing are shown in the following image:



SEM-PLS Inner Model Image

Source: Results of data processing with Smart PLS 4.0 (2025)

1) Direct Influence Analysis

Research hypothesis testing was conducted to determine whether the hypothesis was accepted or not. The testing procedure was carried out by comparing the calculated t-test with the t-table, assuming that the calculated t-test is greater than the t-table. The t-table value for a 5% significance level is 1.96. The following table shows the results of the test of influence between variables using Partial Least Squares analysis.

Table of Path Coefficients of Direct Influence

	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (O/STDEV)	P values
Knowledge quality -> HR performance	0.325	0.328	0.073	4,487	0.000
Knowledge quality -> Innovative work behavior	0.658	0.657	0.052	12,566	0.000
Innovative work behavior -> HR performance	0.577	0.577	0.067	8,634	0.000

Source: Results of data processing with Smart PLS 4.1.0 (2025)

Based on the results of the data processing presented above, the testing for each research hypothesis can be explained further, namely:

a. Hypothesis Testing 1:

H1: The quality of knowledge possessed by human resources will influence the increase in innovative work behavior.

The first hypothesis test was carried out by looking at the estimated value of the coefficient (original sample) of the influence of knowledge quality on increasing Innovative work behavior namely 0.658. These results provide evidence that the quality of knowledge has a positive influence on Innovative work behavior. The results of the t-test confirmed these findings, where the magnitude of the t-count was known (12.566) is more than the t-table (1.96) with p (0.000) less than 0.05. The conclusion of the test is that the quality of knowledge has a positive and significant influence on Innovative work behavior. This result means that the better the quality of knowledge, the better Innovative work behavior will tend to increase. Based on this, the first hypothesis proposed in this study, namely "The quality of knowledge possessed by human resources will influence the increase in innovative work behavior," can be accepted.

b. Hypothesis Testing 2:

H: The quality of knowledge will have an impact on improving HR performance.

The second hypothesis test was conducted by looking at the estimated coefficient value (original sample estimate) of the influence of knowledge quality on HR performance, which was 0.325. This result provides evidence that knowledge quality has a positive influence on increasing innovative HR work behavior. The results of the t-test confirmed these findings, where it was known that the calculated t-value (4.487) was greater than the t-table (1.96) with p (0.000) less than 0.05. The conclusion of this test is that knowledge quality positively and significantly influences HR performance. This result means that the better the knowledge quality, the higher HR performance will tend to be. Based on this, the second hypothesis proposed in this study, namely "Knowledge quality will influence increasing HR performance," can be accepted.

c. Hypothesis Testing 3:

H3: High work innovation behavior will have an impact on improving HR performance.

The third hypothesis test was conducted by examining the estimated coefficient (original sample estimate) of the influence of innovative work behavior on HR performance, which was 0.577. This result provides evidence that innovative work behavior has a positive influence on HR performance. The t-test results confirmed this finding, where the calculated t-value (8,634) is more than t-table (1.96) with p (0.000) less than 0.05. The conclusion of the test is that innovative work behavior positively and significantly affects HR performance. This result means that if innovative work behavior is better, HR performance will tend to increase. Based on this, the third hypothesis proposed in this study, namely "High work innovation behavior will have an impact on improving HR performance" can be accepted.

A summary of the results of the hypothesis testing in this study is presented in full in the table.

Summary Table of Hypothesis Test Results

	Hypothesis	t value	p-value	Conclusion
H1	The quality of knowledge possessed by human resources will influence the increase in innovative work behavior.	12,566	0.000	Accepted
H2	The quality of knowledge will have an impact on improving HR performance.	4,487	0.000	Accepted
H3	High work innovation behavior will have an impact on improving HR performance.	8,634	0.000	Accepted

Description: The hypothesis is accepted if $t > 1.96$ and p value < 0.05

Source: Results of data processing with Smart PLS 4.1.0 (2025)

2) Analysis of the Indirect Influence of Knowledge Quality on HR Performance through the Mediation of Innovative Work Behavior

The indirect effect test was conducted to see the influence given by an exogenous variable (Knowledge Quality) on the endogenous variable (HR Performance) through an intervening

variable, namely the variable of Innovative Work Behavior. The indirect effect of Knowledge Quality on HR Performance through the mediation of Innovative Work Behavior is depicted in the following path diagram:

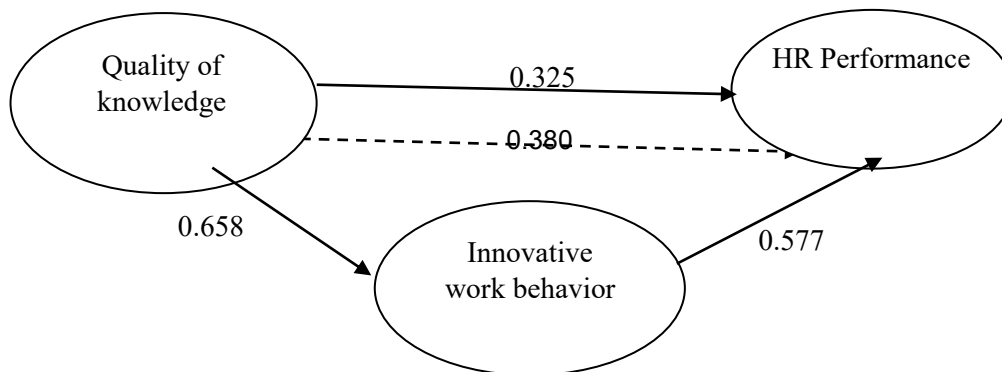


Figure of the Path Coefficient of the Influence of Knowledge Quality on HR Performance through Innovative Work Behavior

Information:

—————→ : Direct influence

- - - - - : Indirect influence

The results of the indirect influence test from the calculation results with smartPLS can be presented in the following table.

Indirect Effect Test Results Table

	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (O/STDEV)	P values
Knowledge quality -> Innovative work behavior -> HR performance	0.380	0.378	0.048	7,915	0.000

Source: Results of data processing with Smart PLS 4.1.0 (2025)

The mediating effect of innovative work behavior in relation to the variable of knowledge quality on HR performance is known to be 0.380. The results of the indirect effect test produce a t-test value of 7,915 ($t > 1.96$) with $p = 0.000 < 0.05$. The conclusion from this test is that innovative work behavior mediates the influence of knowledge quality on HR performance. This means that the quality of knowledge possessed by employees will increase their innovative work behavior. Employees with more innovative work behaviors will more easily find solutions to problems in the field, resulting in more effective and efficient work. This is expected to contribute to employee performance.

3.3. Discussion

1) Quality of knowledge towards innovative work behavior

Knowledge quality influences the increase in innovative work behavior. This result means that the better the quality of knowledge, the more likely it is that innovative work behavior will increase. Similarly, other research also reveals that knowledge sharing has a positive and significant relationship with innovative work behavior.(Almulhim, 2020b). Findings(Bratianu et al., 2023) supports the hypothesis that increased knowledge sharing activities within an organization can encourage the emergence of more innovative work behavior among employees.

Quality of knowledge in this study it was measured from the reflection of four indicators namely indicators of accuracy, completeness, timeliness, and relevance of information. Whereas innovative work behavior in this study it was measured from five indicators namely the IT utilization innovation indicators for problem recognition, idea generation, promotion, realization.

The knowledge quality variable shows that the indicator with the highest outer loading value is punctuality, while the indicator with the highest contribution in the innovative work behavior variable is promotion. These findings indicate that timeliness in the provision and utilization of knowledge plays a dominant role in encouraging innovative idea promotion behavior. The more quickly and relevantly knowledge is available when needed, the greater the opportunity for employees to communicate, convince, and advocate innovative ideas to colleagues and leaders. Thus, the timeliness of knowledge is a key factor in strengthening the effectiveness of innovation promotion within an organization, because innovation depends not only on the quality of ideas, but also on the individual's ability to convey and champion those ideas so that they are accepted and implemented.

Furthermore, the indicator with the lowest outer loading value in the knowledge quality variable was accuracy, while in the innovative work behavior variable, the lowest indicator was idea generation. These results indicate that although knowledge accuracy influences employees' ability to generate new ideas, its contribution is relatively lower compared to other indicators. This indicates that the idea generation process is not solely determined by the accuracy or truth of information, but is also influenced by internal and external individual factors, such as creativity, work experience, organizational culture, and a work climate that supports innovation. Thus, knowledge accuracy remains important as a basis for generating quality ideas, but innovation will be more optimal if the organization also encourages an environment conducive to the exploration of ideas and the development of employee creativity.

2) Quality of knowledge on HR performance behavior

The quality of knowledge influences improvement HR performance. This result means that the better the quality of knowledge, the better HR performance will tend to increase further. These results support research De Zubielquiet.al (2019) stated that knowledge quality contributes to company performance.

Quality of knowledge in this study it was measured from the reflection of four indicators namely indicators of accuracy, completeness, timeliness, and relevance of information. Whereas HR Performance in this study it was measured from the reflection of six indicators namely indicators of quality, quantity, need for supervision, interpersonal influence.

The knowledge quality variable shows that the indicator with the highest outer loading value is timeliness, while the indicator with the largest contribution in the HR performance variable is quantity. These findings indicate that timeliness in the provision and utilization of knowledge plays a major role in increasing the amount of work output produced by human resources. The more quickly and accurately knowledge is available when needed, the more efficient employees are in carrying out their tasks, thus being able to complete a larger volume of work. This means that the timeliness of information and knowledge is a strategic factor in increasing work productivity, as delays in knowledge can hamper work processes and reduce the achievement of individual and organizational performance targets.

Furthermore, the indicator with the lowest outer loading value in the knowledge quality variable is accuracy, while in the HR performance variable, the lowest indicator is work quality. These results indicate that although knowledge accuracy influences the improvement of work quality, its contribution is relatively weaker compared to other indicators. This indicates that work quality is not only determined by the accuracy of the information held, but is also influenced by other factors such as individual competence, work experience, standard operating procedures, and supervision and work culture within the organization. Thus, knowledge accuracy remains a crucial prerequisite for producing quality work, but optimally improving performance quality requires the support of a structured work system, competency development, and a conducive work environment.

3) Innovative work behavior towards HR performance behavior

Innovative work behavior has an impact on increasing HR performance. This result means that the better the innovative work behavior, the better HR performance will tend to increase further. The results of the study (Chaithanapat et al., 2022; Hanaysha et al., 2022; Teixeira Filho et al., 2022) shows a positive influence of innovation on performance.

Variables Innovative work behavior in this study it was measured from five indicators namely the IT utilization innovation indicators for problem recognition, idea generation, promotion, realization. Whereas HR Performance in this study it was measured from the reflection of six indicators namely indicators of quality, quantity, need for supervision, interpersonal influence.

The innovative work behavior variable shows that the indicator with the highest outer loading value is promotion, while the highest indicator in the HR performance variable is quantity. This finding indicates that employees' ability to promote new ideas, concepts, and work methods plays a dominant role in increasing the amount of work output produced. The more actively individuals communicate and champion innovative ideas in the workplace, the greater the opportunity for the organization to adopt more efficient and productive work methods. Thus, the promotion of innovation not only functions as a means of disseminating ideas but also becomes a driver of increased performance volume, particularly in the form of quantity of work output. This shows that innovative behavior oriented towards promoting ideas can create accelerated work processes that have a direct impact on increasing HR productivity.

Furthermore, the indicator with the lowest outer loading value for the innovative work behavior variable is idea generation, while the lowest indicator for the HR performance variable is quality. These results indicate that despite its relatively lower contribution, an individual's ability to generate new ideas still influences the quality of work output. The better the idea generation process, the greater the potential for creative and value-added solutions, which ultimately impacts the quality of work output. Thus, idea generation is a crucial foundation for producing superior performance, particularly in terms of accuracy, precision, and innovation in task completion. Therefore, although its influence on work quantity is not as strong as idea promotion, organizations still need to encourage a culture of creative thinking to continuously improve the quality of work output.

4. Conclusion

This study confirms that the quality of knowledge and innovative work behavior are key factors in improving HR performance at KPPBC TMP A Semarang. The mutually reinforcing relationship between timeliness and idea promotion, as well as between accuracy and idea generation, indicates that organizations need to manage knowledge effectively and encourage continuous innovation to achieve optimal performance. The conclusion of the hypothesis proof is: The quality of knowledge has an influence on increasing innovative work behavior. This finding indicates that the higher the level of accuracy, completeness, timeliness, and relevance of information possessed by employees, the greater the tendency for innovative work behavior will also increase. The quality of knowledge has an influence on improving HR performance. The results of this study indicate that improving the quality of knowledge will be followed by an increase in the quality and quantity of work results, a decrease in the need for supervision, and improvements in interpersonal relationships in the work environment. Innovative work behavior has an influence on improving HR performance. This finding proves that the better the ability of employees to utilize information technology, identify problems, generate ideas, promote ideas, and realize innovation, the higher the level of HR performance achieved.

5. References

Journals:

- Akram, T., Lei, S., Haider, M. J., & Hussain, S. T. (2020). The impact of organizational justice on employee innovative work behavior: Mediating role of knowledge sharing. *Journal of Innovation and Knowledge*, 5(2), 117–129. <https://doi.org/10.1016/j.jik.2019.10.001>
- Alavi, M., & Leidner, D. E. (2001). Knowledge management and knowledge management systems: conceptual foundations and an agenda for research. *MIS Quarterly*, 25(1), 107–136. <http://www.jstor.org/stable/3250961>
- Almatrooshi, M., Khalifa, G. S. A., Alneadi, K. M., & El-Aidie, S. (2021). *Organizational Performance: The Role of Leadership and Employee Innovative Behaviour* (Vol. 3, Issue 2). <https://www.city.edu.my/CUeJAR>
- Almulhim, A. F. (2020). Linking knowledge sharing to innovative work behaviour: The role of psychological empowerment. *Journal of Asian Finance, Economics and Business*, 7(9), 549–560. <https://doi.org/10.13106/JAFEB.2020.VOL7.NO9.549>
- Ayub, A., Hassan, M. U., Hassan, I. E., & Laghari, S. (2016). Knowledge-Centered Culture and Knowledge-Oriented Leadership as the Key Enablers of Knowledge Creation Process: A Study of Corporate Sector in Pakistan. In *ACTA UNIVERSITATIS DANUBIUS* (Vol. 12, Issue 2).
- Bogers, M. L. A. M., Garud, R., Thomas, L. D. W., Tuertscher, P., & Yoo, Y. (2022). Digital innovation: transforming research and practice. *Innovation: Organization and Management*, 24(1), 4–12. <https://doi.org/10.1080/14479338.2021.2005465>
- Bos-Nehles, A., Renkema, M., & Janssen, M. (2017). HRM and innovative work behaviour: a systematic literature review. In *Personnel Review* (Vol. 46, Issue 7, pp. 1228–1253). Emerald Group Publishing Ltd. <https://doi.org/10.1108/PR-09-2016-0257>
- Cangialosi, N., Odoardi, C., & Battistelli, A. (2020). Learning Climate and Innovative Work Behavior, the Mediating Role of the Learning Potential of the Workplace. *Vocations and Learning*, 13(2), 263–280. <https://doi.org/10.1007/s12186-019-09235-y>
- Chaithanapat, P., Punnakitikashem, P., Khin Khin Oo, N. C., & Rakthin, S. (2022a). Relationships among knowledge-oriented leadership, customer knowledge management, innovation quality and firm performance in SMEs. *Journal of Innovation and Knowledge*, 7(1). <https://doi.org/10.1016/j.jik.2022.100162>
- Chaithanapat, P., Punnakitikashem, P., Khin Khin Oo, N. C., & Rakthin, S. (2022b). Relationships among knowledge-oriented leadership, customer knowledge

- management, innovation quality and firm performance in SMEs. *Journal of Innovation and Knowledge*, 7(1). <https://doi.org/10.1016/j.jik.2022.100162>
- De Jong, J., & Den Hartog, D. (2010). Measuring innovative work behaviour. *Creativity and Innovation Management*, 19(1), 23–36. <https://doi.org/10.1111/j.1467-8691.2010.00547.x>
- de Silva, M., Howells, J., & Meyer, M. (2018). Innovation intermediaries and collaboration: Knowledge-based practices and internal value creation. *Research Policy*, 47(1), 70–87. <https://doi.org/10.1016/j.respol.2017.09.011>
- Donate, M. J., & Sánchez de Pablo, J. D. (2015). The role of knowledge-oriented leadership in knowledge management practices and innovation. *Journal of Business Research*, 68(2), 360–370. <https://doi.org/10.1016/j.ibusres.2014.06.022>
- Eckert, S., & Assmann, K. (2021). The “ProQuote” initiative: women journalists in Germany push to revolutionize newsroom leadership. *Feminist Media Studies*. <https://doi.org/10.1080/14680777.2021.1881984>
- Faraz, N. A., Mughal, M. F., Ahmed, F., Raza, A., & Khalid Iqbal, M. (2019). The Impact of Servant Leadership on Employees’ Innovative Work Behaviour-Mediating Role of Psychological Empowerment. *International Journal of Management Science and Business Administration*, 5(3), 10–21. <https://doi.org/10.18775/ijmsba.1849-5664-5419.2014.53.1002>
- Farooq Sahibzada, U., Xu, Y., Afshan, G., & Khalid, R. (2021). Knowledge-oriented leadership towards organizational performance: symmetrical and asymmetrical approach. *Business Process Management Journal*, 27(6), 1720–1746. <https://doi.org/10.1108/BPMJ-03-2021-0125>
- Fathiyah, F., Andriani, Z., & Fitriaty, F. (2022). Pengaruh Kepemimpinan Transformasional dan Motivasi Kerja terhadap Kinerja Karyawan dengan Perilaku Kerja Inovatif sebagai Variabel Mediasi pada Pegawai Dinas Penanaman Modal dan Pelayanan Terpadu Satu Pintu Kabupaten Muaro Jambi. *Jurnal Ilmiah Universitas Batanghari Jambi*, 22(3), 2269. <https://doi.org/10.33087/jiubj.v22i3.3057>
- Grošelj, M., Černe, M., Penger, S., & Grah, B. (2020). Authentic and transformational leadership and innovative work behaviour: the moderating role of psychological empowerment. *European Journal of Innovation Management*, 24(3), 677–706. <https://doi.org/10.1108/EJIM-10-2019-0294>
- Gürlek, M., & Çemberci, M. (2020a). Understanding the relationships among knowledge-oriented leadership, knowledge management capacity, innovation performance and organizational performance: A serial mediation analysis. *Kybernetes*, 49(11), 2819–2846. <https://doi.org/10.1108/K-09-2019-0632>

- Gürlek, M., & Çemberci, M. (2020b). Understanding the relationships among knowledge-oriented leadership, knowledge management capacity, innovation performance and organizational performance: A serial mediation analysis. *Kybernetes*, 49(11), 2819–2846. <https://doi.org/10.1108/K-09-2019-0632>
- Hair, J. F. (2021). Next-generation prediction metrics for composite-based PLS-SEM. *Industrial Management and Data Systems*, 121(1), 5–11. <https://doi.org/10.1108/IMDS-08-2020-0505>
- Hair, J. F., Howard, M. C., & Nitzl, C. (2020). Assessing measurement model quality in PLS-SEM using confirmatory composite analysis. *Journal of Business Research*, 109, 101–110. <https://doi.org/10.1016/j.jbusres.2019.11.069>
- Hanaysha, J. R., Al-Shaikh, M. E., Joghee, S., & Alzoubi, H. M. (2022). Impact of Innovation Capabilities on Business Sustainability in Small and Medium Enterprises. *FIIB Business Review*, 11(1), 67–78. <https://doi.org/10.1177/23197145211042232>
- Hughes, M., Rigtering, J. P. C., Covin, J. G., Bouncken, R. B., & Kraus, S. (2018). Innovative Behaviour, Trust and Perceived Workplace Performance. *British Journal of Management*, 29(4), 750–768. <https://doi.org/10.1111/1467-8551.12305>
- Hughes-Morgan, M., Kolev, K., McNamara, G., & Mcnamara Eli Broad Professor of Management, G. (2018). A Meta-Analytic Review of Competitive Aggressiveness Research. In *Meta-Analytic Review of Competitive Aggressiveness Research* (Vol. 367). https://epublications.marquette.edu/mgmt_fac/367
- Javed, B., Abdullah, I., Zaffar, M. A., Haque, A. U., & Rubab, U. (2019). Inclusive leadership and innovative work behavior: The role of psychological empowerment. *Journal of Management and Organization*, 25(4), 554–571. <https://doi.org/10.1017/jmo.2018.50>
- Jong, J. P. J. de, & Hartog, D. N. Den. (2008). Innovative Work Behavior: Measurement and Validation. *Scientific Analysis of Entrepreneurship and SMEs*, November, 1–27.

Books:

- Ghozali. (2018). *Metode penelitian*. 35–47.
- Hair, J. F. (1995). *MultiVariate Data Analysis*. Jakarta: Gramedia Pustaka Utama.