


Human Resource Development and Its Impact on Employee Performance is Mediated by Innovative Behavior in Employees of the Tirta Yaponno Ambon Regional

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Article Info	ABSTRACT
Keywords: Human Resource Development, Innovative Behavior, Performance.Background	This study aims to analyze the influence of human resource development and its impact on employee performance, as well as to examine the mediated influence of innovation behavior on employees of Perumdam Tirta Yaponno Ambon. The population in this study was 35 employees, with the entire population being sampled. Data were collected using the SmartPLS analysis tool. The results showed that Human resource development has no significant effect on employee performance. Furthermore, human resource development has a significant effect on innovation behavior. Innovation behavior has a significant effect on employee performance. Furthermore, there is an influence between human resource development and performance through innovation behavior as a mediating variable. Based on the results of this study, it is hoped that the Tirta Yaponno Ambon Regional Public Works Office will pay more attention to employee human resource development and that employees must be more proactive and produce innovative behaviors to improve performance
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INTRODUCTION

Human resources are one of the most important resources of an organization, therefore, they must be nurtured, cultivated, and developed. When recruiting human resources, organizations must select qualified human resources, namely those with a good work ethic or who can perform well. Human resource development can function well if education, investment in employee knowledge and skills run smoothly (Manahutu et al., 2020), work skills and productivity, and employee satisfaction with the business environment (Hartini et al., 2021; Robbins et al., 2018).

The needs of individuals and organizations continue to evolve, and in this Information Age phenomenon, needs and organizations are moving from material to information. This shows

that information has been internalized. Information is the most useful resource and phenomenon today, it is seen that knowledge, especially information (knowledge), is very necessary for every person or organization to achieve more positive performance as a learning tool that can fulfill and guide them in thinking and acting. Therefore, strategic steps are needed to manage information, namely through information management. Human resource development is primarily an effort to provide someone with knowledge and skills as well as attitudes, so that the person has the ability to carry out daily organizational tasks or activities, employees or members of the organization are more confident in facing problems in their duties (Latief et al., 2019; Latief et al., 2018; Syardiansah et al., 2020; Haryati et al., 2019). Human resource development is an important part of managing work to achieve goals. The goal is to utilize the potential of Human Resources, as an effort to create professionalism in work. Innovation is a key element in the development of modern organizations. Rapid technological developments and increasingly fierce competition drive organizations to continuously innovate to maintain a competitive advantage. Innovation can include developing new products, streamlining production processes, implementing new technologies, and improving an organization's management and operational systems (Lestari 2019).

The Regional Drinking Water Company (PERUMDAM) Tirta Yaponno in Ambon City, in facing the current digital era, will require employees to improve their performance. The company is very aware of the importance of human resource development to increase the competitiveness and competence of the company and its employees. However, there are still problems that occur within the company related to how to foster innovative work behavior. In relation to HR Development, the problem faced is the low work ethic so that PDAM changed its status to Perumdam Tirta Yaponno. By changing to Perumdam, it is hoped that the company's performance can improve, where employees can work professionally from management to workers. By prioritizing professionalism and innovation in work, Perumdam Tirta Yaponno is expected to improve service performance and generate profits.

METHODS

Human resources are one of the most important resources of an organization, therefore, they must be nurtured, cultivated, and developed. When recruiting human resources, organizations must select qualified human resources, namely those with a good work ethic or who can perform well. Human resource development can function well if education, investment in employee knowledge and skills run smoothly (Manahutu et al., 2020), work skills and productivity, and employee satisfaction with the business environment (Hartini et al., 2021; Robbins et al., 2018).

The needs of individuals and organizations continue to evolve, and in this Information Age phenomenon, needs and organizations are moving from material to information. This shows that information has been internalized. Information is the most useful resource and phenomenon today, it is seen that knowledge, especially information (knowledge), is very necessary for every person or organization to achieve more positive performance as a learning tool that can fulfill and guide them in thinking and acting. Therefore, strategic steps are needed to manage information, namely through information management. Human resource development is primarily an effort to provide someone with knowledge and skills as well as attitudes, so that the person has the ability to carry out daily organizational tasks or activities, employees or members of the organization are more confident in facing problems in their duties (Latief et al., 2019; Latief et al., 2018; Syardiansah et al., 2020; Haryati et al., 2019). Human resource development is an important part of managing work to achieve goals. The goal is to utilize the potential of Human Resources, as an effort to create professionalism in work. Innovation is a key element in the development of modern organizations. Rapid technological developments and increasingly fierce competition drive organizations to continuously innovate to maintain a competitive advantage. Innovation can include developing new products, streamlining production processes, implementing new technologies, and improving an organization's management and operational systems (Lestari 2019).

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RESULTS AND DISCUSSION

a. Validity Test

Validity testing is a test used to measure the validity of a questionnaire. Validity testing is conducted to determine whether respondents' answers are truly suitable for use in this research. A questionnaire is considered valid if it is able to reveal what it is intended to measure by the intended audience (Ghozali, 2015: 52).

Convergent Validity

Table 1. Outer Loading First Test

Variables	Indicator	Outer Loading	Information
Human Resources Development (X)	PSDM1	0.854	Valid
	PSDM2	0.872	Valid
	PSDM3	0.791	Valid
	PSDM4	0.870	Valid
	PSDM5	0.826	Valid
	PSDM6	0.918	Valid
	PSDM7	0.821	Valid
	PSDM8	0.822	Valid
	PSDM9	0.849	Valid
	PSDM10	0.759	Valid
Innovation Behavior (Z)	PI1	0.668	Invalid
	PI2	0.797	Valid
	PI3	0.730	Valid
	PI4	0.759	Valid
	PI5	0.788	Valid
	PI6	0.681	Invalid
	PI7	0.774	Valid
	PI8	0.831	Valid
	PI9	0.840	Valid
	PI10	0.873	Valid
Employee performance (Y)	KK1	0.792	Valid
	KK2	0.730	Valid
	KK3	0.591	Invalid
	KK4	0.725	Valid
	KK5	0.708	Valid
	KK6	0.868	Valid
	KK7	0.856	Valid
	KK8	0.708	Valid
	KK9	0.835	Valid
	KK10	0.639	Invalid

Source: Primary data processed by PLS, (2025)

Based on the table above, several indicators have outer loading values that do not reach the maximum limit of >0.7, including PI1, PI6, KK3, and KK10. Therefore, it is important to recalculate by removing these invalid indicators. The outer loading values obtained after recalculation are as follows:

Table 2. Outer Loading Second test

Variables	Indicator	Outer Loading	Information
Human Resources Development (X)	PSDM1	0.854	Valid
	PSDM2	0.872	Valid
	PSDM3	0.791	Valid
	PSDM4	0.870	Valid
	PSDM5	0.826	Valid
	PSDM6	0.918	Valid
	PSDM7	0.821	Valid
	PSDM8	0.822	Valid
	PSDM9	0.849	Valid
	PSDM10	0.759	Valid
Innovation Behavior (Z)	PI2	0.797	Valid
	PI3	0.730	Valid
	PI4	0.759	Valid
	PI5	0.788	Valid
	PI7	0.774	Valid
	PI8	0.831	Valid
	PI9	0.840	Valid
Employee performance (Y)	PI10	0.873	Valid
	KK1	0.792	Valid
	KK2	0.730	Valid
	KK4	0.725	Valid
	KK5	0.708	Valid
	KK6	0.868	Valid
	KK7	0.856	Valid
	KK8	0.708	Valid
KK9	0.835	Valid	

Source: Primary data processed by PLS, (2025)

The table above shows that all tested variables have outer loading values that meet the established criteria. All outer loading values are greater than 0.7, allowing the study to proceed to the next testing stage.

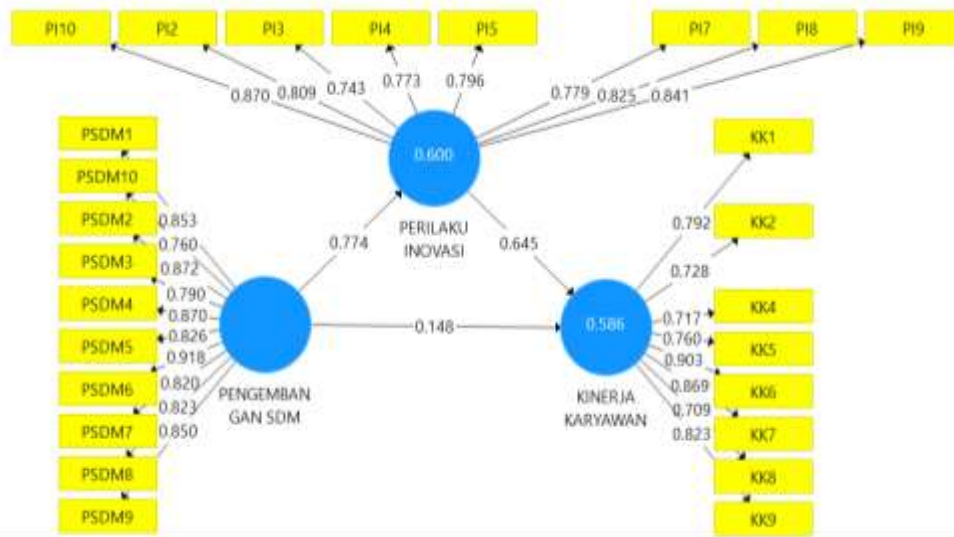


Figure 1. Outer Loading

Average Variance Extracted (AVE)

Testing was conducted by measuring the AVE. Convergent validity is considered good if the AVE value is greater than 0.5. The following are the processed results from the data.

Table 3. AVE Value Results

Variables	AVE	Information
Human Resources Development (X)	0.704	Valid
Innovation Behavior (Z)	0.648	Valid
Employee Performance (Y)	0.628	Valid
Average	0.660	Valid

Source: Processed primary data, (2025)

Based on the table data, it is known that the AVE value for variable X (Human Resource Development) is 0.704, variable Z (Innovation Behavior) is 0.648, and variable Y (Employee Performance) is 0.628. This indicates that each construct has met the convergent validity criteria, so it can be concluded that the measurement model in this study is feasible and reliable in representing the measured concept.

Discriminant Validity

Discriminant Validity can be assessed based on the cross-loading of the measurement with the construct. The following are the results.

Table 4. Results Cross Loading

Indicator	Human Resources Development (X)	Innovation Behavior (Z)	Employee Performance (Y)
PSDM1	0.853	0.585	0.480
PSDM2	0.872	0.574	0.475
PSDM3	0.790	0.529	0.516

Indicator	Human Resources Development (X)	Innovation Behavior (Z)	Employee Performance (Y)
PSDM4	0.870	0.675	0.540
PSDM5	0.826	0.690	0.527
PSDM6	0.918	0.742	0.602
PSDM7	0.820	0.590	0.596
PSDM8	0.823	0.699	0.595
PSDM9	0.850	0.760	0.582
PSDM10	0.760	0.591	0.490
PI2	0.606	0.809	0.675
PI3	0.737	0.743	0.473
PI4	0.505	0.773	0.554
PI5	0.632	0.796	0.695
PI7	0.475	0.779	0.684
PI8	0.681	0.825	0.564
PI9	0.738	0.841	0.587
PI10	0.583	0.870	0.652
KK1	0.357	0.541	0.792
KK2	0.745	0.669	0.728
KK4	0.425	0.560	0.717
KK5	0.402	0.460	0.760
KK6	0.514	0.646	0.903
KK7	0.437	0.547	0.869
KK8	0.509	0.524	0.709
KK9	0.588	0.749	0.823

Source: Processed primary data, (2025)

b. Reliability Test

According to Hussein in Aziz et al. (2021: 297), reliability testing is strengthened by Cronbach's Alpha. The expected value is > 0.6 for all constructs.

Table 5. Results Cronbach's Alpha

Indicator	Cronbach's Alpha	Information
Human Resources Development (X)	0.953	Reliable
Innovation Behavior (Z)	0.922	Reliable
Employee Performance (Y)	0.913	Reliable

Source: Processed primary data, (2025)

Based on the data in the table above, it is known that the Cronbach's Alpha for all variables is > 0.60. The HR development variable (X) is 0.953, the innovation behavior variable (Z) is 0.922, and the employee performance variable (Y) is 0.913. Thus, these results indicate that each research variable has met the Cronbach's alpha value statement. Therefore, all variables have a high level of reliability.

Table 6. Results Composite Reliability

Indicator	Composite Reliability	Information
Human Resources Development (X)	0.960	Reliable
Innovation Behavior (Z)	0.936	Reliable
Employee Performance (Y)	0.930	Reliable

Source: Processed primary data, (2025)

Based on the table data above, it is known that the composite reliability of all variables is > 0.60 . The HR development variable (X) is 0.960, the innovation behavior variable (Z) is 0.936, and the employee performance variable (Y) is 0.930. . Thus, these results can indicate that each research variable has met the composite reliability value statement. So all variables have a level of reliability.

c. Hypothesis Testing

Hypothesis testing to determine the existence of a significant relationship between constructs is carried out by first evaluating the direct influence.

Table 7. Results of Direct Effect Test and Significance Test

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T-Statistics (O/STDEV)	P Values	Results
Human Resources Development → Employee Performance	0.148	0.134	0.178	0.833	0.405	Rejected
Human Resource Development → Innovation Behavior	0.774	0.795	0.053	14,674	0.000	Accepted
Innovation Behavior → Employee Performance	0.645	0.672	0.170	3,790	0.000	Accepted

Source: Primary data processed by PLS, (2025)

Based on the above table, it can be stated that the hypothesis testing is that the influence of HR development on performance has a probability value (p-value) of $0.405 > 0.05$, meaning that HR development does not have a significant effect on employee performance, thus the hypothesis is rejected. The influence of HR development on innovation behavior has a probability value (p-values) of $0.006 < 0.05$, meaning that HR development has a significant effect on innovation behavior, thus the hypothesis is

accepted. The influence of innovation behavior on performance has a probability value (p-values) of $0.000 < 0.05$, meaning that innovation behavior has a significant effect on employee performance. Therefore, the hypothesis is accepted.

Table 8. Results of Indirect Effect Test and Significance Test

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T-Statistics (O/STDEV)	P Values	Results
Human Resource Development → Innovation Behavior → Employee Performance	0.499	0.534	0.141	3,550	0.000	Accepted

Source: Primary data processed by PLS, (2025)

Based on the table above, the P-value is $0.000 < 0.05$. Thus, there is an influence between HR development and performance through innovation behavior as a mediating variable. This indicates that the hypothesis is accepted.

The Influence of Human Resource Development on the Performance of Perumdam Tirta Yaponno Ambon

The Influence of Human Resource Development based on the results of the analysis shows that Human Resource Development has a positive effect on Employee Performance. Human Resource Development is a planned effort undertaken by management to improve employee competency and the performance of an organization through training, education, and development programs (Marwansyah, 2014). Human Resource Development is based on the fact that individuals or employees need knowledge, skills, and abilities that are developed so that they are able to work well. For employees of Perumdam Tirta Yaponno Ambon, if increasing HR development includes involving employees in training, developing employee careers, increasingly encouraging employee innovation and providing employees with opportunities to apply new knowledge in their work, it will further encourage employees to produce better performance. The results of this study support research conducted by Febrisma Ramadhiya Findarti (2016), Nur Seviana (2018), Indra H. Rintjap (2021), (Wibowo (2022 and Rachmatika (2024) which stated that there is a significant influence between the Human Resource Development variable on Employee Performance.

The Influence of Human Resource Development on Innovative Behavior

Human resource development must foster innovative behavior in employees. Research clearly shows that human resource development has a significant impact on innovative work

behavior. For employees of Perumdam Tirta Yaponno Ambon, Innovative Work Behavior will be demonstrated by employees if the company pays attention to HR development properly, including employees being included in training, career development, and providing employees with opportunities to apply new knowledge in their work. Employee innovative behavior includes employees developing new ideas, innovative new ways of working, and new approaches in completing tasks. This research supports research by Rosmayatin et.al (2021) and Arif et.al (2023) which states that HR development influences Innovative Work Behavior.

The Influence of Human Resource Development on Performance with Mediation by Innovative Work Behavior.

The results of the study show that human resource development has a significant influence on performance, mediated by innovative work behavior. For employees of Perumdam Tirta Yaponno Ambon, innovative work behavior will encourage increased human resource development to drive higher performance. This research supports the results of research by D. Arif et al. (2023) and Permana (2024) that innovative behavior can mediate human resource development and employee performance.

CONCLUSION

Human resource development for Perumdam Tirta Yaponno Ambon employees is very crucial and important, because the more employees are given attention in terms of their self-development, including employee education and training, employee career development and involving employees in self-development activities and their work capacity, the more it will encourage employee work enthusiasm and work productivity, which in turn will improve performance. Human resource development among Perumdam Tirta Yaponno employees will encourage innovative work behavior. Likewise, increased innovative work behavior will help achieve employee performance at Perumdam Tirta Yaponno Ambon. Innovative behavior of employees in terms of implementing new ideas, innovative ideas, working methods and more innovative work approaches if continuously developed and given space by the office to employees, will be a driving force for further development of employee human resources in order to encourage employee performance achievement.

REFERENCE

Bangalino, Graselsya Febri Arung, et al. "PENGARUH KNOWLEDGE MANAGEMENT, TECHNOLOGY DAN DISIPLIN KERJA TERHADAP KINERJA PEGAWAI (Studi Kasus Pegawai Kantor

- Dinas Lingkungan Hidup Kabupaten Manokwari).” *Cakrawala Management Business Journal*, vol. 2, no. 1, 2019, p. 292, <https://doi.org/10.30862/cm-bj.v2i1.20>.
- Khairawati, Salihah, et al. “Dampak Knowledge Management Terhadap Kinerja Karyawan: Sebuah Pendekatan Manajemen Islam.” *Jurnal Ilmiah Ekonomi Islam*, vol. 7, no. 2, 2021, pp. 612–20, <https://doi.org/10.29040/jiei.v7i2.2481>.
- Lestari, M. D., et al. “Knowledge Management Dan Pengembangan Sumber Daya Manusia Terhadap Kinerja Karyawan Bank Mandiri KC Tahuna.” *Productivity*, vol. 1, no. 4, 2020, pp. 334–38, <https://ejournal.unsrat.ac.id/index.php/productivity/article/view/30071>.
- Mayliza, Riri, and Asra Tanjung. *PENGARUH PENERAPAN KNOWLADGE MANAGEMENT DAN PENGEMBANGAN SUMBER DAYA MANUSIA TERHADAP KINERJA KARYAWAN PT CPJF FRAM 1 PENDAHULUAN Perkembangan Teknologi Dan Komunikasi Yang Semakin Cepat Menuntut Manusia Untuk Bertindak Semakin Cepat Dengan Memperhatikan*. 2022, pp. 1239–56.
- Meliyani, Irma, et al. *Pengaruh Knowledge Management Terhadap Kinerja Karyawan Di PT . ISS Site PDG Bandung*. pp. 451–57. Monsow, E., et al. “Pengaruh Knowledge Management Terhadap Kinerja Karyawan Di Bank Mayapada Kcu Mega Mas Manado.” *Jurnal Administrasi Bisnis*, vol. 6, no. 001, 2018, p.269329.
- Notoatmodjo, Soekidjo. *Pengembangan Sumber Daya Manusia Dan Aplikasinya*. no. 1, 2008, pp. 11–18.
- Rehatalanit, Y. L. R. “Pengaruh Implementasi Knowledge Managemen Untuk Meningkatkan Kinerja Karyawan Pada Pt. X.” *Jurnal Mitra Manajemen*, vol. 10, no. 1, 2019, pp. 107–14.
- Saharuddin, Saharuddin, and Budiman Budiman. “Pengaruh Kualitas Sumber Daya Manusia Dalam Meningkatkan Kinerja Tim Pengelolah Kegiatan Program Nasional Pemberdayaan Masyarakat Mandiri Pedesaan (Tpk Pnpm-Mp) Pnpm-Mp Di Kecamatan Masamba Kabupaten Luwu Utara.” *Jurnal Manajemen STIE Muhammadiyah Palopo*, vol. 1, no. 2, 2016, pp. 58–72, <https://doi.org/10.35906/jm001.v1i2.123>.
- Sanjaya, Muhammad Melda Asy. “PENGARUH KNOWLEDGE MANAGEMENT DAN PEMBELAJARAN ORGANISASI TERHADAP KINERJA KARYAWAN (Studi Pada Bank Rakyat Indonesia Malang).” *Jurnal Ilmiah Mahasiswa FEB*, vol. 10, 2022. 2.055%0Ahttps://doi.org/10.1016/j.ijfatigue.2019.02.006%0Ahttps://doi.org/10.1016/j.matlet.2019.04.024%0Ahttps://doi.org/10.1016/j.matlet.2019.127252%0Ahttp://dx.doi.o