

Analysis of the Effect of Information Technology Utilization and Work Culture on Employee Performance with Employee Competency as Intervening Variables at PT Pegadaian (Persero) Kanwil I Medan

Febri Sari Siahaan¹, Rahim Matondang², Iskandar Rini²

^{1,2}Master of Management Study Program on Postgraduate School of University of Sumatera Utara

Corresponding Author: Febri Sari Siahaan

ABSTRACT

Human resources are one of the key factors in facing the development of digital technology. The objective of this research is to discover The Effect of Information Technology and Work Culture on The Employee Performance with Competency as Intervening Variable in PT. Pegadaian (PERSERO) Regional Office I Medan. The research method used is descriptive analysis with quantitative approach to all employees at PT. Pegadaian (Persero) Regional Office I Medan, as much as 91 respondents. Path analysis is used as the analysis technique with the SPSS program. The result found that Information Technology positively affect Performance; Information Technology has positive influence on Competency; Work Culture has positive effect on Performance; Work Culture positively affect Competency; and Competency has positive effect on Performance. Based on the direct and indirect calculation of Work Culture and Information Technology on Competency, it leads to a lower indirect effect of Work Culture and Information Technology on Performance, which means that Competency as intervening variable is unable to influence Work Culture and Information Technology on Performance. Competency is the variable that has the most dominant impact on Performance with a coefficient value of 0.353.

Keywords: Information Technology, Work Culture, Performance, Competency, PT. Pegadaian

BACKGROUND

Human resources are one of the key factors in facing the development of digital technology. Therefore, the human resources department must create a system that is able to create quality, skilled human resources who are highly competitive in global competition. The development of technology leads to increasingly developing competencies, companies require employees who are able to adapt to these technological developments. This becomes a priority because employees are a determining factor in operating other production factors in the company.

In improving performance, companies cannot be separated from information technology applications (information technology, hereinafter referred to as IT). Information technology is the process of exchanging data and messages without the constraints of space and time. Information technology is defined as a set of different tools including hardware, information theory, data networks, workstations and artificial intelligence (robotics), that the use of information is a systematic process used to carry out an activity (Emperor, 2015). In addition, work culture also has a role in determining the direction of the organization, directing what can be done, directing how to allocate resources,

managing organizational resources, and as a tool for dealing with problems and opportunities in the environment.

PT Pegadaian (Persero) Kanwil I Medan is one of the regional offices which is at an unstable and fluctuating achievement. Pegadaian performance can be seen in the achievement of OSL (Outstanding Loan) and the net profit earned every year. The following is a table of OSL achievement and net profit at PT Pegadaian Kanwil I Medan during 2017-2019. PT Pegadaian (Persero) Regional Office I Medan experienced a decline in growth in the 2016-2019 OSL. From this data shows that in 2016 it has reached the sales target that has been set, but in 2017-2019 it did not meet the target set by PT Pegadaian (Persero) Kanwil I Medan. This situation can be caused by several factors that need to be studied more deeply both internally and externally.

The results of the pre-survey conducted on 10 employees of PT Pegadaian Kanwil I Medan showed that employee performance was in moderate criteria (69.3%), Information Technology Utilization was moderate (68.4%), Work culture also showed moderate criteria (68, 4%) and the competency variable also shows moderate criteria (67.3%). This shows that the application of information technology, work culture, performance and competence has not been going well. So that

researchers feel the need to analyze the influence of the application of information technology, work culture and work competence on employee performance at PT Pegadaian Kanwil I Medan.

Anggi Post Arnu (2017) in his research on Organizational Culture, Competence, and Organizational Commitment to Employee Performance of Bank Jabar Banten, Karawang Branch, shows that the contribution of organizational culture variables, competence and organizational commitment is quite large in influencing performance. However, it is necessary to pay attention to other aspects that affect performance in addition to the variables studied, including leadership. This research is also corroborated by research conducted by Wicaksono (2018) showing that the use of information technology directly improves the performance of employees of mulya residents of dairy cooperatives. The use of information technology also improves the employee's performance of the Mulya residents' milk cooperative through competence.

Conceptual Framework

Based on previous research and pre-survey results that have been conducted on employees of PT Pegadaian Kanwil I Medan the research framework can be structured as follows:

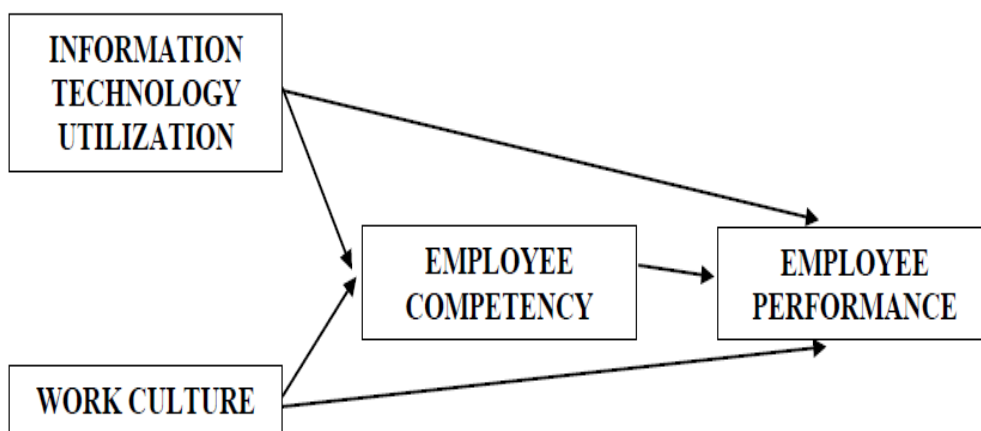


Figure 1: Conceptual Framework

Hypothesis

1. Information technology has a positive influence on competence
2. Work culture has a positive influence on competence
3. Information technology has a positive influence on performance
4. Work culture has a positive influence on performance
5. Competence has a positive influence on performance
6. Information technology has a positive influence on performance through competence
7. Work culture has a positive influence on performance through competence.

RESEARCH METHODS

This research uses a quantitative approach, the type of research is a survey using descriptive analytical methods. Data were collected through interviews and questionnaires. The population in this study

was addressed to all employees at PT. Pegadaian (Persero) Regional Office I Medan, amounting to 932 people. The sampling technique is a sampling technique. The sampling technique used in this study was simple random sampling (probability sampling) and selected 91 samples of respondents. This research will use path analysis techniques (path analysis) with the help of SPSS.

RESULTS AND DISCUSSION

Path Analysis

Partial test is used to test the effect of the use of information technology (X1) and work culture (X2) on employee competence (Z) partially. Partial test in this study was conducted to determine the effect of each variable in the use of information technology and work culture partially on competence. The results of the t test statistical analysis can be seen as follows:

Table 1: Significance test for Individual Parameters (t test)

Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	4.185	1.761		2.376	.020
	Information Technology	.197	.069	.314	2.861	.005
	Work Culture	.481	.106	.498	4.527	.000

a. Dependent Variable: Competency

Based on the results of "Coefficients", it can be seen that the significance value of the two variables, namely the use of information technology (X1) = 0.005 and work culture (X2) = 0.000

is smaller than 0.05. These results conclude that the variables of information technology utilization (X1) and work culture (X2) have a significant effect on the competency variable (Z).

Table 2: Coefficient of Determination (R²)

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.770 ^a	.593	.584	1.46053

a. Predictors: (Constant), Work Culture, Technology Information

The amount of the R Square value contained in the "Model Summary" table is 0.593, this shows that the contribution of the influence of the information technology utilization variable (X1) and work culture (X2) to the competency variable (Z) is 59.3% while the remaining 40, 7% is the contribution of other variables not included in this study.

Partial test is used to test the effect of the use of information technology (X1), work culture (X2) and competence (Z) on performance (Y) partially. The partial test in this study was conducted to determine the effect of each variable on the use of information technology, work culture and competence. The results of the t test statistical analysis can be seen as follows:

Table 3: Significance test for Individual Parameters (t test)

Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	-3.601	1.468		-2.452	.016
	Information Technology	.249	.058	.348	4.279	.000
	Work Culture	.309	.095	.280	3.239	.002
	Competency	.404	.086	.353	4.710	.000

a. Dependent Variable: Performance

Table 4: Coefficient of Determination (R²)

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.894 ^a	.798	.792	1.18082

a. Predictors: (Constant), Competency, Information Technology, Work Culture

The amount of the R Square value contained in the "Model Summary" table is 0.798, this shows that the contribution of the influence of the variables on the use of information technology (X1), work culture (X2) and the competency variable (Z) is 79.8% while the remaining 20.2% is the contribution of other variables which were not included in this study.

Analysis of the effect of the use of information technology (X1) on competence (Z): from the above analysis, the significance value of the use of information technology (X1) is 0.000 <0.05, so it can be concluded that there is a direct significant effect of the use of information technology (X1) on competence. (Z).

Analysis of the influence of work culture (X2) on competence (Z): from the above analysis, the significance value of work culture (X2) is 0.000 <0.05, so it can be concluded that there is a direct influence of work culture (X2) on competence (Z).

Analysis of the effect of the use of information technology (X1) on performance (Y): from the above analysis, the significance value of the use of information technology (X1) is 0.000 <0.05, so it can be concluded that there is a direct significant effect of the use of information technology X1 on performance (Y).

Analysis of the influence of work culture (X2) on performance (Y): from the above analysis, the significance value of work culture (X2) is 0.002 <0.05, so it can be concluded that there is a direct influence of work culture X2 on Z performance.

Analysis of the influence of competence (Z) on performance (Y): from the above analysis, the significance value of competence (Z) is 0.000 <0.05, so it can be concluded that there is a significant effect of competence (Z) on performance (Y) directly.

Table 5: Hypothesis Testing Results

No	Hypothesis	Results
1	The effect of the use of information technology on competence	Hypothesis Accepted
2	The influence of work culture on competence	Hypothesis Accepted
3	The effect of the use of information technology on performance	Hypothesis Accepted
4	The influence of work culture on performance	Hypothesis Accepted
5	Effect of competence on performance	Hypothesis Accepted
6	The effect of the use of information technology on performance through competence	Hypothesis Denied
7	The influence of work culture on performance through competence	Hypothesis Denied

Based on the analysis that has been stated previously, it is proven that information technology and work culture with competence as an intervening variable do not have a positive and insignificant effect on performance. It can be seen in

Table 2 that the direct effect is accepted and the indirect effect is rejected.

Efforts that can be made to improve employee performance are getting better, so agencies need to pay attention to and provide training policies on the use of information technology and the application

of work culture, so that employees become more knowledgeable about information technology in an effort to improve performance, if the better the level of understanding of technology and work culture employees, it will provide quality in work and improve employee competence.

CONCLUSION

1. The use of information technology has a positive and significant effect on competence
2. Work culture has a positive and significant effect on competence
3. The use of information technology has a positive and significant effect on performance
4. Work culture has a positive and significant effect on performance
5. Competence has a positive and significant effect on performance
6. Competence does not have a positive effect in mediating the relationship between the use of information technology and performance
7. Competence does not have a positive effect in mediating the relationship between work culture and performance.

REFERENCE

1. Abdul Kadir dan Terra Ch. Triwahyuni. 2013. Pengantar Teknologi Informasi Edisi Revisi. Yogyakarta: Andi.
2. Al Eqab, Mahmud., and Dalia Adel. 2013. *The Impact of IT Sophistications on the perceived Usefulness Of Accounting Information Characteristics among Jordanian Listed Companies. International Journal of Business and Social Science.* 4(3), pp: 143-155.
3. Assagaf, Yusran. 2012. Pengaruh Budaya Kerja Terhadap Kinerja Karyawan Pada PT Hadji Kalla Cabang Alauddin Makasar., Jurnal. Fakultas Manajemen Universitas Hasanuddin.
4. Arini, Mita Dwi. 2015. Evaluasi Penerapan Tax Planning Atas Pajak Penghasilan Badan Pada PT Kharisma Karya Sejahtera.Jurnal. Fakultas Ekonomi Univeritas Andalas.
5. Azwar Nasir, Ranti Oktari (2011). Pengaruh Pemanfaatan Teknologi Informasi dan Pengendalian Intern Terhadap Kinerja Instansi Pemerintah (Studi Pada Satuan Kerja Perangkat Daerah Kabupaten Kampar). Jurnal Ekonomi Vol 19, No 02 (2011).
6. Chandra, 2016. Pengaruh Pemanfaatan Teknologi Informasi terhadap Ketepatan Waktu Pelaporan Keuangan Dalam rangka Mewujudkan Transparansi Dan Akuntabilitas. Jurnal EMBA Vol.4 No.1 Hal 1519-1530. ISSN 2303-1174.
7. Darmawan, D. (2012). Pendidikan Teknologi Informasi dan Komunikasi. Bandung. PT Remaja Rosdakarya.
8. Edy Sutrisno, 2014. Manajemen Sumber Daya Manusia. Cetak Ke Enam. Pranada Media Group, Jakarta.
9. Febriatmoko. bogy.2015. Meningkatkan kinerja bisnis melalui keunggulan bersaing kuliner khas semarang.jurnal.universitas diponegoro.
10. Galih Pamungkas.2016. Pengaruh Budaya Organisasi, Karakteristik Kerja, dan Stres Kerja, Serta Dampaknya Pada Kinerja Pegawai (Studi Pada PT. PLN (Persero) AP2B Sistem Minahasa. Jurnal Riset Bisnis dan Manajemen. Vol 4 ,No.3, Edisi Khusus SDM 2016: 369-380.
11. Ghozali, Imam. 2018. Aplikasi Analisis *Multivariate* dengan Program IBM SPSS 25. Badan Penerbit Universitas Diponegoro: Semarang.
12. Gusmanto, Arif.2020. Pengaruh lingkungan kerja, kompensasi dan budaya kerja terhadap kepuasan kerja dan kinerja karyawan PT. Bank Pengkreditan Rakyat lengayang kabupaten pesisir selatan.jurnal. Stie “kbp” padang.
13. Goodhue, D. L.; and Thompson, R.L. 1995. “Task-Technology Fit and Individual Performance”. MIS Quarterly. June, p.6-15.
14. Kaisar, Adietya. 2015. Analisis pengaruh pemanfaatan teknologi informasi dan inovasi terhadap keunggulan bersaing untuk meningkatkan kinerja organisasi. Jurnal. Fakultas Ekonomika dan Bisnis Universitas Diponegoro.
15. Lihua Jia,Xiangfeng Guo, Xiaopeng Lu dan Juan Chen, "Preparation of Novel Ethylene Glycol Monomethyl Ether Fatty Acid Monoester Biodiesel Using Calcined Sodium Silicate," *Energy Fuels*, XXVIII(2013), hal. 5215-5221.
16. Mafliqhah, Nur.2010.Peran Teknologi Informasi Pada Niat Untuk Mendorong Knowledge Sharing Karyawan Sekretariat

- Daerah Pemerintah Kota Surakarta (Sebuah Pengujian Terhadap Teori Difusi Inovasi). Jurnal Ekonomi Universitas Sebelas Maret. Surakarta.
17. Mangkunegara. 2011. Manajemen Sumber Daya Perusahaan. PT. Remaja Rosdakarya. Bandung.
 18. Mentaruk, Yuwelina. 2017. Analisis pengaruh budaya organisasi, disiplin kerja dan komunikasi terhadap kinerja karyawan (studi kasus di pt. angkasa pura 1 (persero) cabang bandara internasional sam ratulangi manado). Jurnal EMBA. Vol.5 No.3 September 2017, Hal.4375-4384.
 19. Muzakki. 2016. Pengaruh penggunaan teknologi informasi terhadap kinerja karyawan. Jurnal. Fakultas Ilmu Administrasi Universitas Brawijaya.
 20. Pabundu, Tika. (2014). Budaya Organisasi dan Peningkatan Kinerja Karyawan. Jakarta : Bumi Aksara.
 21. Pratama, Adi. 2017. Pengaruh budaya kerja, kemampuan dan komitmen organisasi terhadap kinerja karyawan bagian produksi pada PT. Phaprostbk semarang. Jurnal. Universitas Pandanaran Semarang
 22. Purnomo, Budi. 2016. Analisis pengaruh pemanfaatan teknologi informasi dan budaya kerja terhadap kinerja pegawai kantor pertanahan kabupaten kebumen dengan motivasi sebagai variabel moderasi. Jurnal manajemen sumber daya manusia. Vol. 10 no. 1 juni 2016: 106 – 118. Universitas slamet riyadi Surakarta.
 23. Rao, Purba. (2006). Measuring Consumer Perception Through Factor Analysis. The Asian Manager (February-March).
 24. Rivai, Veithzal. 2011, Manajemen Sumber Daya Manusia untuk Perusahaan: dari Teori ke Praktik, Jakarta : Raja Grafindo Persada.
 25. Robbins, P. Stephen. (2006). Perilaku Organisasi. Edisi Sepuluh. Diterjemahkan oleh: Drs. Benyamin Molan. Erlangga, Jakarta.
 26. Rumengan. Gery. 2016. Kontribusi Manajemen Talenta, Inovasi Dan Kompetensi Dalam Meningkatkan Kinerja Bisnis Perusahaan. Jurnal Riset Bisnis dan Manajemen . Vol 4 ,No.4, 2016: 323-332.
 27. Sabihaini ,2002, “Dampak Strategi Bersaing dan Kematangan Teknologi Informasi terhadap Respon Strategik Perusahaan Menghadapi Globalisasi”, Buletin Ekonomi, Manajemen, Ekonomi pembangunan, Akuntansi, UPNVY, No.10:54-62.
 28. Sabihaini. 2006. Analisis Pemanfaatan Teknologi Informasi Dan Kinerja Individual (Studi Pada Rumah Sakit Di Yogyakarta). Jurnal Widy Manajemen & Akuntansi, Vol. 6 No. 1, April 2006: 1 – 16.
 29. Saputra. Desi. 2018. Pengaruh kompetensi, gaya kepemimpinan, budaya kerja dan lingkungan kerjaterhadap kepuasan kerja pegawai dan dampaknya terhadap kinerja pegawai kantor kementerian agama kabupaten aceh barat. Jurnal manajemen pascasarjana universitas syiah kuala. Volume 2, no. 1, januari 2018 – 36.
 30. Sutabri. 2014. Pengantar Teknologi Informasi. Yogyakarta: Andi.
 31. Tahuman. Zainuddin. 2016. Analisis Faktor-Faktor Yang Mempengaruhi Loyalitas Pelanggan Serta Dampaknya Terhadap Keunggulan Bersaing. Jurnal Riset Bisnis dan Manajemen. Vol 4 ,No.3, Edisi Khusus Pemasaran & Keuangan 2016: 445-460.
 32. Thompson, Ronald L., Higgins, Chirtope A. dan Howell, Jane M ., 1991, “Personal Computing : Toward A Conceptual Model Of Utilization” MIS Quarterly, March : 125-143
 33. Yudiastra, Putu. 2015. Pengaruh penggunaan teknologi informasi, disiplin kerja, insentif, *Turnover* terhadap kinerja pegawai. Jurnal manajemen dan bisnis. Volume 12, no. 1, Undiknas Graduate School
- How to cite this article: Siahaan FS, Matondang R, Rini I. Analysis of the effect of information technology utilization and work culture on employee performance with employee competency as intervening variables at PT Pegadaian (Persero) Kanwil I Medan. *International Journal of Research and Review*. 2021; 8(2): 163-168.
