
The Influence Of Competency, Digital Transformation, Skills Updating, And Artificial Intelligence On Employee Performance At The Ministry Of Transportation Terminal Type A Tirtanadi Surakarta

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Abstract .The development of human resource technology is still needed and utilised because human resources can carry out daily tasks in completing their tasks so that management can run well and smoothly. The purpose of this research is to find out and analyze influence competence, digital transformation, renewal skills and artificial intelligence towards performance employee at the Ministry of Transportation Terminal Type A Tirtanadi Surakarta. renewal skills and artificial intelligence on employee performance at the Ministry of Transportation Terminal Type A Tirtanadi Surakarta. This research method uses quantitative research using sampling techniques, namely random sampling, while the sample studied was 100 respondents from 190 employees. The data collection technique in this study used a questionnaire method with data analysis techniques using a quantitative approach with the help of the statistical analysis programme SEM PLS version 3. The results showed that employee competence had a positive and significant effect on employee performance at the. Digital transformation has a positive and significant effect on employee performance at the. Skills renewal has a positive and significant effect on employee performance. Artificial Intelligence (AI) has a positive and significant effect on the performance of employees in improving efficient and effective employee performance.

Keywords : Competence; Digital Transformation; Renewal Skills; Artificial Intelligence; Employee Performance.

INTRODUCTION

An agency must be skilled in responding and adapting effectively towards various changes in the external environment, apart from concentrating on internal problems, the bureaucratic system and human resources are two areas that are starting to change deeply various things as a result of the perception that they must adapt to change era. In the context of technological progress, reliable human resources are still needed to utilize and exploit technology, in addition to requiring technology that keeps up with the times. Technological progress will be meaningless without personnel or equipment capable of operating it effectively. Therefore, so that the bureaucracy can consistently achieve its goals, it also needs competent human resources.

According to researchers observations, a large number of civil servants and non-civil servant employees still have difficulty operating the system, a condition known as "technological failure", which makes it difficult for them to carry out their daily tasks effectively and delays the completion of work.

Thus, it can be said that the level of human resource competency among employees at the Tirtanadi Type A Terminal, Surakarta is still low. This is because daily tasks still take a

long time to complete and require continuous guidance and direction from superiors. Apart from that, some employees often procrastinate work, resulting in work not being completed, employees often receive warnings and reprimands from superiors, and work errors still frequently occur. These factors collectively show that employee competency at Terminal Type A Tirtonadi Surakarta is still not optimal.

Civil servant performance is influenced by various factors, such as artificial intelligence, competency, digital transformation (technology), and skills renewal (reskilling). One important component of performance is competence. The essential characteristics of a person's abilities are called competencies, and these can be manifested in the form of goals, talents, aspects of self-concept, social work, or data collection used. Everyone must be able to do their job effectively; just learning new material is not enough. In order to improve employee performance, competency allows a person to realize work-related tasks that are needed to achieve goals on the part of employees/equipment and leaders smoothly and continuously.

In the era of the Republic of Indonesia 4.0, competency development is very important, especially for Ministry of Transportation employees at the Tirtonadi Type A Terminal, Surakarta, who are the backbone of the bureaucracy. The solution to preparing competent State Civil Apparatus is developing the competence of State Civil Apparatus. One way to overcome the lack of competency possessed by the State Civil Service is through competency development. So far, government agencies have not prioritized developing the competence of the State Civil Apparatus and it has not been properly systematized. The absence of adequate competency development planning documents in most ministries, institutions and regional governments is proof of this. So far, the development of the competency of the State Civil Service has been carried out mainly by accident. Employees who are interested in taking part in training, for example, will be included; in particular, those who are more familiar with staff members in General/Personal Affairs will be less likely to receive information. Government agencies must carry out this task in the future by implementing the competency development of the State Civil Service in a methodical and well-planned manner.

State Civil Apparatus Law no. 5/2014 has provided opportunities for civil servants to improve their qualifications. According to this law, every State Civil Servant must receive at least 20 JP (lesson hours) of self-development every year. In addition, government entities are required by law to create annual competency development planning documents for the State Civil Service; However, competency development planning has not been carried out consistently to date. One of the causes of current obstacles is the lack of standards to improve the capabilities of the State Civil Service.

Guidelines for government agencies to build the skills of their Civil Servants have been released by the State Administration Institute. LAN Regulation Number 10 of 2018, which regulates the development of competency of the State Civil Apparatus, regulates this. The publication of these guidelines marks a significant turning point in the development of the competence of the State Civil Service in Indonesia. Government entities can use this regulation as a reference to determine the level of competency of the State Civil Service.

Government agencies need to pay more serious attention to developing the competence of the State Civil Service in the future, and implementation must be more methodical and planned. The planning, implementation and assessment phases of competency development for the State Civil Service are similar to the phases in the management system. This is a cyclical process where evaluation findings become the basis for planning for the following year. In order for an organization to develop in line with the human resources it has, its infrastructure system and facilities must continue to develop and be improved from time to time according to needs.

Competent human resources uses the performance of each employee to determine whether an organization succeeds or fails. Building such equipment is a painstaking task that requires time and hard work. Personnel management needs to be improved, starting with a competency-based and legally compliant recruitment process. Likewise with career patterns, salaries, promotions or demotions, dismissals, staff development, performance appraisals (PPK), and so on. Changes must be implemented consistently and with high dedication.

Conditions at the Ministry of Transportation Terminal Type A Tirtanadi Surakarta are deep updating employee skills (*reskilling*) so that improvements can be made immediately ability or competence employee through training And education (training) and non-training education. Skills updating (reskilling) through retraining (training) can done through various course, education formal And informal, or other instructions Which directed For increase Skills technical or competence, as well as modify attitude, morality, behavior and employee mindset.

Even though it changes the mindset, morals and behavior of the apparatus through Training is not easy, but it still needs to be done. Enhancement ability or competency through non-training can be done with create work situations and conditions that are conducive to its occurrence increasing abilities, carrying out periodic mutations, creating harmonious interpersonal relationships, and so on.

Current technological advances create new opportunities in the economic, social and economic sectors development self And intelligence artificial (AI) can take switch human work. Answer challenge disruption 4.0 (digital transformation) Where use technology modern

with relying on humans as the main component requires a committed will For develop resources Power man.

In middle bureaucracy Indonesia which No efficient, exists SMART ASN can givehope. Platforms SmartASN expected can facilitate in develop self (DeputyHuman Resources Sector Ministry of PANRB Alex Denni, February 10 2023). Government push institutions to adapt to external global changes in a bureaucratic environment happen with fast.

The strategic plan for Human Resources Development for the State Civil Service (ASN) is based on civil servant management reform, PP No. 11/2017 concerning Management of Civil Servants, and Law no. 5/2014 concerning ASN. ASN Law no. 5/2014, Civil Servant Management PP No. 11/2017, and PP no. 49/2018 concerning PPPK Management (Government Employees with Government Employees with Employment Agreements (PPPK) . ASN is divided into two categories of employees based on articles 6 and 7 of Law No. 5 of 2014: PNS (Civil Servants), who are appointed as permanent employees by Personnel Development Officer and has a national employee registration number, and PPPK (Government Employees with a Work Agreement), who are appointed as employees with a work agreement by the Personnel Development Officer in accordance with the national employee registration number.

Digital platforms have long been used by non-profit businesses and public institutions such as government organization. How digital platforms can achieve deep policy integration process service public is step furthermore for platforms the. In line with matter That,(Bima Hari, from the National Civil Service Agency, 2023) stated that the speed of adaptation employee government to change digitalization must follow development era. Literacy digital, communication, attitude easy adapt, And Work Which efficient is a number ofchange trend in place Work. Person – person Which proficient use technology digital are the competent human resources needed today. Utilizing the Internet of Things (IoT) and Artificial Intelligence is part from competence This. Recognized that era 4.0 opens up opportunities for human resources in all fields to own and implement about the latest technological advances. Advances in Artificial Intelligence technology in several year final has create possibilities new For increase effectiveness and efficiency of human resource management. Artificial Intelligence (AI) has capacity For collect and analyze data with fast, find pattern Which complicated,and offers in-depth information for decision making. AI can offer smarter and more specialized solutions to improve internal workforce management context of the HR department in the office that owns it operational aspects complex ones like terminal.

Human resources who are competent in using digital technology are really needed by the nation today. Realizing smart factories, including the Internet of Things (IoT), is included in this competency. It is recognized that the fourth industrial revolution (IRR) opens up opportunities for human resources (HR) in all fields to have the latest technological competencies.

Remember importance talent in success industry in era 4.0, so need done program update Skills (reskilling) source Power man which in accordance with the needs of today's business and government organizations. Talented human resources are competencies needed today. For the successful application of the principles of functional assignment work, managers and implementers in all fields of work in Indonesia must have formal educational credentials , competencies acquired through formal and non-formal education formal, mastery application technology information And communication, And involved in self-development sustainable as well as skills renewal (reskilling). Source Power Man must focus For become employee Which literate technology And aware social Because they are the future of the organization, and information technology-based HR has passion And encouragement For do reskilling.

METHOD

Research uses types study quantitative participatory whereas population studied _ that is Employee Ministry of Transportation Interested Type A Tirtonadi Surakarta and the samples studied as many as 100 employees Ministry of Transportation Interested Type A Tirtonadi Surakarta. Taking samples using random sampling methods and tools analysis using SEM PLS version 3.

RESULTS AND DISCUSSION

Analysis Results

Hypothesis testing can be seen by looking at the results of the path coefficient in bootstrapping analysis. The influence relationship can be said to be significant if the t-statistic $> t$ table (1.97) and the p value < 0.05 , while the magnitude of the influence can be seen from the original sample value, following the results of the path coefficient test:

Table 1 : Path Coefficients

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics	P Values
Kompetensi Pegawai (X1) -> Kinerja Pegawai (Y)	0,342	0,332	0,117	2,927	0,004
Transformasi Digital (X2) -> Kinerja Pegawai (Y)	0,253	0,252	0,090	2,802	0,005

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics	P Values
Pembaharuan Keterampilan (X3) -> Kinerja Pegawai (Y)	0,269	0,270	0,110	2,437	0,015
Artificial Intelligence (X4) -> Kinerja Pegawai (Y)	0,151	0,163	0,059	2,588	0,010

Based on the results of the path coefficient test above, it shows that the influence of competence Employees (X1) to Employee Performance (Y) have the t- statistical results are greater from t table (1.97) ie of 2.927 and p value <0.05 , namely of 0.004 while the original sample/ large influence of 0.342, so it can be concluded that influence Competence Employee (X1) to Employee Performance (Y) is positive and significant so that **H1 Accepted**.

Value of t- statistics influence Digital Transformation (X2) on Employee Performance (Y) is greater from t table (1.97) ie of 2.802 and p value <0.05 , namely of 0.005 while the original sample/ large influence of 0.253, so it can be concluded that influence Digital Transformation (X2) on Employee Performance (Y) is positive and significant so that **H2 Accepted**.

Value of t- statistics influence Update Skills (X3) on Employee Performance (Y) are greater from t table (1.97) ie of 2.437 and p value <0.05 , namely of 0.015 while the original sample/ large influence of 0.269, so it can be concluded that influence Update Skills (X3) on Employee Performance (Y) are positive and significant so that **H3 Accepted**.

Value of t- statistics influence *Artificial Intelligence* (X4) on Employee Performance (Y) is greater from t table (1.97) ie of 2.588 and p value <0.05 , namely of 0.010 while the original sample/ large influence of 0.151, so it can be concluded that influence *Artificial Intelligence* (X4) on Employee Performance (Y) is positive and significant so that **H4 Accepted**.

Discussion of Results

Influence Competence Employee on Employee Performance. Findings this research shows that there is an influence of competence employee to performance employee in a way positive and significant with large influence 0.342. These results are meaningful that the more tall level competence employee so will the more high performance too employee Ministry of Transportation Terminal Type A Tirtonadi Surakarta. This research proves that knowledge in using equipment such as computers and others that employees have will help them complete their work well, experience and working with a team can help employees complete their work on time. Apart from that, employee performance is also supported by conditions where employees continue to increase their knowledge through improving skills (training/bimtek), and the attitude of employees who always follow norms and are responsive and diligent in

carrying out the work given by the leadership. A competent employee attitude is also demonstrated by the employee's willingness to always help friends who need help with work and convey it politely, as well as respecting the opinions of fellow colleagues in every discussion. The competencies possessed by these employees produce maximum employee performance results as demonstrated by the quality of employee work at the Ministry of Transportation Terminal Type A Tirtanadi Surakarta. The results of this research are in line with the results of research conducted by (Mulyasari, 2019) and (Rosmaini & Cape, 2019) which shows that competency results have a positive and significant effect on employee performance. This means that the better the competency, the higher the employee's performance will be. Employees who have good competence will also produce good performance because these employees have the ability For carry out something a task or carrying out something work which is based on knowledge And skills as well supported by ethos Work Which demanded for this position (Rohida, 2018).

Based on results on then to improve performance employee Ministry of Transportation Terminal Type A Tirtanadi Surakarta so management Ministry of Transportation Terminal Type A Tirtanadi Surakarta needs to improve employee competency. Employee competency which can be described through 13 indicators can be improved by increasing knowledge, understanding, skills by means of improvement and development competence employee become the main key in improving performance employees, to improve performance employee, Ministry of Transportation Terminal Type A Tirtanadi Surakarta can focus on efforts development competence through training, education and development programs career. Support given to employees to improve skills, knowledge, and abilities employee, Ministry of Transportation Terminal Type A Tirtanadi Surakarta can confirm that they own competent and capable team operate tasks efficiently.

Influence Digital Transformation on Employee Performance. Findings this research shows that there is an influence of digital transformation on performance employee in a way positive and significant with large influence 0.253. These results are meaningful that the more tall level digital transformation then will the more high performance too employee Ministry of Transportation Terminal Type A Tirtanadi Surakarta. This research proves that digital transformation in the work environment, such as the transition from paper documents to digital, the use of digital technology to support work will make work easier and faster so that work becomes efficient. Digital transformation makes work errors rare and easy to correct, optimizing the storage of important data so that information about work data is quick and easy to obtain at any time. The increase in employee productivity caused by digital transformation

cannot be separated from the behavior of employees who are more enthusiastic about working because of high technology. This digital transformation also makes the process of paying salaries and other things faster and on time. Employee productivity is also supported by fast leadership decision making and is carried out based on real time data obtained digitally so that information is quickly received/delivered and the desired frequency of reports is available systematically and regularly digitally. High productivity due to digital transformation causes optimal employee performance. The results of this research are in line with research conducted by (Fauzan, 2021), (Firdaus et al.,2021) and (Fauziah & Wahyuningtyas,2020) which shows that the use of digital technology has an effect on improving employee performance. Organizations or companies that successfully carry out digital transformation will have more efficient and flexible performance And adaptive, as well as expand Spirit change Work Which creative, innovative And Empowercompetitive.

Enhancement The performance caused by digital transformation is closely related to ability adaptation employee to digital change. Digital transformation outlined through 17 indicators it is associated with adoption technology and digital transformation that require employees to continue increase understanding and skills they related to new technology. Capable employee _ in a way proactive learn and integrate new concepts in the environment digital work can provide greater contribution to success digital transformation of organizations. Therefore it, attempts to improve ability adaptation employees, like maintenance training and development sustainable, can become the key to maximizing benefit digital transformation of performance organization through potency full from source Power skilled and adaptive humans.

Influence Update Skills on Employee Performance. Findings this research shows that there is an influence of renewal Skills to performance employee in a way positive and significant with large influence 0.269. These results are meaningful that the more tall level renewal Skills so will the more high performance too employee Ministry of Transportation Terminal Type A Tirtonadi Surakarta. This research shows that technological changes make employees gain knowledge and knowledge, and also make them learn every time there is a new technological system change (change), this condition makes employees skills in using technology increase so that employees can use technology to support work to be more efficient. Matching the tasks given by superiors with the skills possessed by employees makes employees more quickly and has no difficulty in carrying out their duties so that employees have no problem carrying out the tasks assigned to them. Ministry of Transportation Terminal Type A Tirtonadi Surakarta is under development career, organization/departmentprioritize suitability

of employee education so that employees feel that their skills match the tasks assigned to them. Apart from that, the opportunity for employees to take part in training to improve competence in accordance with their job qualifications makes employees more skilled and this makes employee performance more optimal. This research is in line with research conducted by (DP Wulandari, 2021) which shows that to achieve quality employee resources, it can be done by forming a generation of superior employees. Good performance requires intellectual and physical abilities in accordance with the work someone, so that the Ministry of Transportation Terminal Type A Tirtonadi Surakarta needs to improve employee skills to increase competitiveness and performance.

Based on results on then to improve performance employee Ministry of Transportation Terminal Type A Tirtonadi Surakarta so management Ministry of Transportation Terminal Type A Tirtonadi Surakarta needs to increase skills renewal. Skills renewal which can be described through 15 indicators can be improved by providing relevant and up-to-date training, Ministry of Transportation Terminal Type A Tirtonadi Surakarta can ensure that employees have the latest knowledge and skills that suit their job demands. In this context, employee empowerment through skills renewal not only enriches individuals professionally, but also creates superior work teams. Therefore, implementing a planned and sustainable skills renewal program can be the key to improving employee performance and bringing positive benefits to the growth and sustainability of the organization.

The Influence of Artificial Intelligence on Employee Performance. Findings this research shows that there is the influence of *Artificial Intelligence* (AI) on performance employee in a way positive and significant with large influence 0.151. These results are meaningful that the more good use of AI then will the more high performance too employee Ministry of Transportation Terminal Type A Tirtonadi Surakarta. This research shows that AI has helped identify and reduce errors in the work of Ministry of Transportation employees Terminal Type A Tirtonadi Surakarta. The existence of AI improves quality of results work, making employees consistent in achieving quality standards and feeling like they have more control over their work due to the use of AI so that employee work results can be optimal. Use of AI by employees at the Ministry of Transportation Terminal Type A Tirtonadi Surakarta helps provide me with more information and tools to make better decisions at work providing relevant solutions and recommendations for carrying out work tasks, this makes employees more productive and optimizes allocation time so that employee work is completed on time. Use of AI in the Ministry of Transportation Terminal Type A It can be concluded that Tirtonadi Surakarta can help employees in carrying out their work so that employee performance is

optimal. The results of this research are in line with research conducted by (Wijayati et al., 2022), the research results show that AI has a significant positive effect on employee performance. M adopt idea intelligence artificial (artificial intelligence (AI)), possible employees do analysis with Good, fast, comprehensive, deep, and integrated because of AI give data Which very comprehensive and wide, possible everyperson For No only observe results from A choice with accountability Andtransparency, but also offers various ideas and changes for organizational growth.

Enhancement The performance caused by AI is closely related to ability employees in utilizing AI. Artificial Intelligence (AI) explained Through these 17 indicators related to employees' ability to utilize AI technology, AI implementation provides opportunities for automation of routine tasks, faster data analysis, and smarter decision making. Therefore, employees who are able to master and utilize AI features effectively will be able to improve the quality of their work. Training and skill development related to AI is important to ensure that employees can optimize the potential of this technology to support their tasks. Thus, improving employee performance does not only depend on advances in AI technology itself, but also on employees' capabilities and understanding in using it wisely in their work environment.

CONCLUSION

Employee competency has a significant impact positive and significant to performance employee Ministry of Transportation Terminal Type A Tirtonadi Surakarta. This is meaningful that if employee own high competence so results performance employee will high too. Digital transformation has a positive and significant effect on employee performance at the Ministry of Transportation Terminal Type A Tirtonadi Surakarta. This is meaningful that digital transformation helps employees in operation his task so that performance employees can increase with it digital transformation. Skills renewal has a positive and significant effect on employee performance at the Ministry of Transportation Terminal Type A Tirtonadi Surakarta. This is meaningful that renewal skills can play a role important in improving ability employee so that this may help increase performance employee. *Artificial Intelligence* (AI) has a positive and significant effect on employee performance at the Ministry of Transportation Terminal Type A Tirtonadi Surakarta. This is meaningful that use of AI in activities Work proven to improve performance employee.

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