Saudi Journal of Economics and Finance

Abbreviated Key Title: Saudi J Econ Fin ISSN 2523-9414 (Print) | ISSN 2523-6563 (Online) Scholars Middle East Publishers, Dubai, United Arab Emirates Journal homepage: http://saudijournals.com

Original Research Article

Digital Revolution: Aligning Transactional Leadership and Competencies to Improve ASN Performance (Case Study of Semarang City Transportation Service ASN)

Nurwahyudin¹, Hendrix Setiawan^{1*}, Yoga Sasono¹, Gita Sugiyarti¹

¹Faculty of Economics and Business, University of 17 August 1945 Semarang, Jl. Pemuda No.70, Pandansari, Kec. Semarang Tengah, Kota Semarang, Jawa Tengah 50133, Indonesia

DOI: https://doi.org/10.36348/sjef.2024.v08i08.002 | **Received:** 21.06.2024 | **Accepted:** 29.07.2024 | **Published:** 09.08.2024

*Corresponding author: Hendrix Setiawan

Faculty of Economics and Business, University of 17 August 1945 Semarang, Jl. Pemuda No.70, Pandansari, Kec. Semarang Tengah, Kota Semarang, Jawa Tengah 50133, Indonesia

Abstract

This study aims to analyze the impact of transactional leadership style and digital competence on the performance of State Civil Apparatus (ASN) in the era of the digital revolution, with employee motivation as an intervening variable. This study uses a quantitative approach with a sample of 110 ASN from the State Civil Apparatus (ASN) at the Semarang City Transportation Service agency. Data was collected through an online questionnaire and used Structural Equation Modelling (SEM) to analyze. Outcome of the study show that transactional leadership has a positive impact on employee motivation and ASN performance. Digital competency has been proven to have a significant impact on improving ASN performance, both directly and through increasing motivation. Employee motivation acts as a partial mediator in the relationship between transactional leadership, digital competence, and ASN performance. These findings emphasize the importance of aligning transactional leadership styles with developing ASN digital competencies in facing the challenges of the digital revolution. The practical implications of this research include recommendations for leadership development programs and digital competency training for ASN, as well as strategies for increasing employee motivation in the context of government digital transformation.

Keywords: Transactional Leadership, Digital Competence, ASN Performance, Employee Motivation, Digital Revolution, Government Transformation, PLS-SEM.

Copyright © 2024 The Author(s): This is an open-access article distributed under the terms of the Creative Commons Attribution 4.0 International License (CC BY-NC 4.0) which permits unrestricted use, distribution, and reproduction in any medium for non-commercial use provided the original author and source are credited.

INTRODUCTION

In the context of government organizations, the Industrial Revolution 4.0 encourages digital transformation in the provision of public services. Egovernment is one of the main priorities for increasing transparency, efficiency and accountability (Gomes. & Sousa, 2021). However, digital transformation brings new challenges, such as the need to develop digital literacy among civil servants, overcome the digital divide, and ensure data security (Janowski, 2015).

To face these challenges, government organizations need to develop a work culture that supports continuous learning, collaboration and innovation (Mergel *et al.*, 2018). Strong leadership and strategic vision are critical to facilitating digital transformation and ensuring that the entire organization is ready to embrace change (Van Wart *et al.*, 2017).

The State Civil Service plays an important role in the era of digital society, requiring adequate skills and competencies, especially in digital technology literacy (Ayu Mayangsari Riyadi, 2023). The effectiveness of the Civil Service relies heavily on continuous competency development, with at least 20 hours of training per year to improve individual and organizational performance. The digital era emphasizes the urgency for civil servants to improve digital competence to be in line with egovernment implementation and provide optimal public services. Additionally, transactional leadership, like entrepreneurial leadership, is considered essential for navigating the challenges and opportunities presented to drive innovation and excellence in service delivery.

One aspect that receives special attention in efforts to improve ASN performance is leadership style. Transactional leadership, characterized by clear exchanges between leaders and subordinates regarding tasks and rewards, has long been recognized as an

effective approach in the management of public organizations (Jensen *et al.*, 2019). In the context of digital transformation, transactional leadership can play an important role in motivating ASN to achieve specific targets related to technology implementation and public service innovation. Recent research by Li *et al.*, (2021) point out that transactional leadership has positive impact on employee performance in organizations undergoing digital transformation. However, the study also underscores the importance of combining a transactional leadership style with the development of employees' digital competencies to achieve optimal results.

Digital competency, which includes the ability to use information and communication technology effectively, has become an essential skill for ASN in the era of the digital revolution. According to Schulz and Hennis (2023), digital competence does not only include technical skills, but also includes an understanding of the ethical and social implications of digital technology in the government context. Developing digital competence among ASN is both a challenge and an opportunity for the government to improve the quality of public services. A study conducted by Cordella and Paletti (2022) revealed that the level of ASN digital competence is positively correlated with the level of innovation and efficiency in the provision of public services. However, the research also shows that there is a significant digital competency gap between ASN at various levels and government agencies. This raises the question of how digital competency development strategies can be aligned with existing leadership styles to optimize ASN performance.

Employee motivation emerged as another key factor influencing ASN performance in the context of digital transformation. Contemporary motivation theory emphasizes the importance of intrinsic and extrinsic factors in motivating employees (Ryan and Deci, 2020). In the context of the public sector, public service motivation has long been recognized as the main driver of ASN performance (Perry *et al.*, 2021). However, how this motivation interacts with the demands of digital competence and transactional leadership styles in the era of the digital revolution still requires further exploration.

Research conducted by Kim and Fernandez (2022) shows that employee motivation can act as a mediator between leadership style and organizational performance in the context of government digital transformation. This study highlights the importance of understanding the dynamics of employee motivation in efforts to align transactional leadership and digital competency development to improve ASN performance.

Although a number of studies have examined individual aspects of transactional leadership, digital competence, and employee motivation in the context of public organizational performance, there is still a gap in

understanding how these factors interact simultaneously in the context of the digital revolution. The study conducted by Mergel *et al.*, (2023) emphasize the importance of a holistic approach in understanding the dynamics of digital transformation in the public sector, which includes technological, organizational and human resource aspects.

In the Indonesian context, research on government digital transformation has shown significant variations in the level of readiness and implementation in various regions and agencies (Salsabila and Purnomo, 2022). This raises questions about how factors such as transactional leadership, digital competence, and employee motivation contribute to such variations and how this in turn affects overall ASN performance.

Given the complexity and urgency of this issue, comprehensive research is needed to analyze the interaction between transactional leadership, digital competence, and employee motivation in the context of ASN performance in the era of the digital revolution. A deeper understanding of these dynamics will provide valuable insights for policy makers and public management practitioners in designing effective strategies to improve ASN performance amidst the ongoing digital transformation.

Therefore, this study investigates the impact of transactional leadership style and digital capabilities on ASNs' performance by considering the mediating role of employee motivation. By applying a quantitative approach and using structural equation modeling (SEM), this study aims to provide a more nuanced understanding of how transactional leadership and digital skills development can be aligned to optimize ASNs' performance in the context of the digital revolution.

The outcome of this study are expected to make significant theoretical and practical contributions. Theoretically, this study will enrich the literature on public management and digital transformation by providing an integrative model that links leadership, competency, motivation and performance in the context of the digital revolution. Practically, the findings of this research can be a reference for the government in designing leadership development programs, digital competency training, and effective motivation strategies to improve ASN performance in the digital era.

In order to achieve this goal, this research will explore various aspects of the phenomenon studied, including the dynamics of transactional leadership in the context of digital bureaucracy, challenges and opportunities in developing ASN digital competencies, as well as factors that influence employee motivation in facing digital transformation. Thus, it is hoped that this research can make a meaningful contribution in efforts to align human resources and technology to create a more

effective and responsive government in the era of the digital revolution.

The selection of the Semarang Transportation Department as the research object was based on several strategic considerations. As an integral part of the Semarang smart city program, the Transportation Department plays a crucial role in implementing smart mobility initiatives, making it a clear example of digital transformation in public services (Setiadi et al., 2022). Reflecting the dynamics of leadership and skills development in the digital age, the agency has been strongly committed to adopting digital technologies such as intelligent traffic management systems and real-time traffic information applications (Putra and Suharyanto, 2023). As an agency that deals directly with the community, the Semarang City Transportation Departement offers a unique perspective on the role of ASN motivation and performance in the success of the digital transformation of public services (Widowati et al., 2022). The complexity of the tasks faced, from traffic management to organizing mass transportation, reflects the various challenges of ASN in the era of the digital revolution. Coupled with data accessibility and institutional support, this selection is expected to provide applicable and relevant insights regarding the alignment of transactional leadership, digital competence, and employee motivation in improving ASN performance in the era of digital transformation.

The research question asked is: What is the influence of transactional leadership style and digital competence on employee motivation and civil servant performance at the Semarang City Transportation Department? and does employee motivation act as an effective mediator in the relationship between transactional leadership style, digital competence and civil servant performance?

Theoretical Models and Research Hypotheses Employee Performance

Employee performance in the State Civil Service (ASN) is a multifaceted concept that can be evaluated through various parameters such as quality of work, quantity of work, timeliness, cost effectiveness, need for supervision, and the impact of interpersonal skills (Ohoiwutun, 2023). Research emphasizes the importance of human capital, competency development, organizational commitment, culture and work discipline in improving the performance and career development of ASN in government organizations (Ayu Mayangsari Riyadi, 2023; Ina Mega Nuryati & Hikmah Hikmah, 2023; Sidabutar et al., 2023). In addition, internal motivation, especially public service motivation, has been identified as a key factor in improving employee performance in ASN, contributing to the overall image and competence of the organization (Nursanto et al., 2023).

The successful performance of ASN employees is determined by factors such as competence, motivation, work environment and leadership (Robbins & Judge, 2017). Leadership style, digital technology literacy, employee involvement, organizational culture, and performance management systems are key factors that influence ASN performance (Gaibu, 2022; Haryani et al., 2023; Rochmawati & Indiyati, 2022). Additionally, digital technology literacy and employee engagement play an important role in improving performance, with technostress having a negative impact on employee performance in the context of digital transformation processes (Cini et al., 2023; Sulila, 2022). Understanding and addressing these factors can lead to improved performance, efficiency, and quality of service among ASN employees, ultimately benefiting the organization and the communities they serve.

Employee Motivation

Employee motivation is a key factor in improving organizational performance, including in the public service sector. Robbins and Judge (2019) confirm that motivation as a process that describes an intensity, direction, and persistence of an individual to achieve goals. In the work context, employee motivation refers to the internal and external motives that influence employee behavior and performance in achieving organizational goals. Popular motivation theories, such as Maslow's Hierarchy of Needs Theory and Herzberg's Two-Factor Theory, have long provided the basis for understanding employee motivation (Ryan and Deci, 2020). Recent study by Perry et al., (2021) highlight the importance of public service motivation as a unique factor in improving ASNs' performance. This study shows that employees with high public service motivation tend to have higher commitment and performance in serving the community. In this sense, Kim and Fernandez (2022) found that in the context of digital transformation in government, employee motivation acts as a mediator between leadership style and organizational performance.

The role of employee motivation is becoming increasingly important in the era of the digital revolution. Berman *et al.*, (2023) highlighted that intrinsic motivation, such as a sense of achievement and self-development, plays a significant role in encouraging ASNs to adopt and optimize the use of new technology. Meanwhile, extrinsic factors such as reward and recognition systems remain relevant in maintaining high performance amidst rapid technological change.

The case study conducted by Nurhakim *et al.*, (2022) on e-government implementation in Indonesia shows that the level of employee motivation is positively correlated with the success of adopting a new digital system. This research reveals that agencies that succeed in motivating their employees through training programs, incentive systems and effective communication show a higher level of success in the digital transformation of public services.

H1: Employee motivation has a positive effect on the performance of civil servants.

Leadership Style

The transactional leadership style is a leadership approach that focuses on clear interactions between leaders and subordinates, where performance and obedience are rewarded or given specific outcomes. Bass and Riggio (2018) define transactional leadership as a leadership style that emphasizes transactions and exchanges between leaders, colleagues, subordinates. In this context, transactional leaders tend explain performance expectations, recognition when goals are met, and take corrective action when deviations from established standards occur. A study by Jensen et al., (2019) found that transactional leadership remains appropriate and effective in public organizational contexts, especially in situations where clarity about tasks and accountabilities is required. This study shows that a transactional leadership style can increase employees' efficiency and productivity, especially when performing routine, structured tasks.

Transactional leadership roles are becoming increasingly complex in the era of digital transformation. Li *et al.*, (2021) found that effective transactional leaders in a digital context are those who are able to align reward systems with the achievement of specific targets related to technology adoption and service innovation. This study also emphasizes the importance of balancing a transactional approach with developing employee digital competence.

A relevant case study is research conducted by Nguyen *et al.*, (2020) in Vietnam's public sector. They observed that government agencies that adopted a transactional leadership style adapted to the digital context demonstrated higher levels of success in egovernment implementation. Leaders who are able to set clear targets for the adoption of new technology and provide appropriate incentives are successful in encouraging increased employee performance in the context of digital transformation.

Furthermore, a comparative study by Mergel *et al.*, (2023) in several OECD countries revealed that transactional leadership, when combined with elements of transformational leadership, can create a conducive environment for digital innovation in the public sector. This research shows that leaders who are able to balance a transactional approach (such as clear target setting and performance evaluation) with a transformative vision of the role of technology in public services, tend to be more successful in managing organizational change in the digital era.

Meanwhile, longitudinal research conducted by Park and Jang (2022) in South Korea explored the effectiveness of transactional leadership in the context of smart city policy implementation. They found that a transactional leadership style was effective in the early stages of implementation, where task clarity and accountability were needed. However, as time goes by, the combination with elements of transformational leadership becomes increasingly important to maintain long-term motivation and innovation.

Recent research by Hartanto *et al.*, (2023) in the context of government digital transformation in Indonesia shows that transactional leadership can increase employee motivation in adopting new technology. They found that leaders who provide incentives and recognition for employees' efforts in improving digital competence tend to encourage higher motivation in implementing e-government initiatives.

Some criticisms of transactional leadership in the context of digital transformation are also worth noting. Cordella and Paletti (2022) warn that relying too much on a transactional approach can hinder the creativity and innovation needed to face complex and dynamic digital challenges. They suggest a more holistic approach that combines transactional elements with the development of a more adaptive and learning-oriented organizational culture.

H2: Transactional leadership style has a positive impact on employee motivation.

H3: Transactional leadership style has a positive impact on the performance of civil servants.

Digital Competence

Digital competency has become a crucial aspect in the era of digital transformation, especially in the public sector. Vuorikari *et al.*, (2022) define digital competence as a set of knowledge, skills and attitudes necessary to use digital technology confidently, creatively and critically to achieve goals related to work, learning, recreation and participation in society. In the context of government, Schulz and Hennis (2023) expand this definition by emphasizing the importance of understanding the ethical and social implications of digital technology in public services.

The role of digital competence in improving employee performance has been proven by various studies. Research by Cordella and Paletti (2022) revealed a positive correlation between the level of digital literacy of ASNs and the level of innovation and efficiency in the provision of public services. They found that employees with high digital competence were better able to optimize the use of technology to increase productivity and service quality.

The relationship between digital competence and employee motivation has also been a focus of research. Ranjbar *et al.*, (2021) found that increasing digital competence can increase employees' sense of self-efficacy, which in turn has a positive impact on their intrinsic motivation. This study shows that employees who feel competent in using digital technology tend to

be more motivated to adopt new innovations and contribute to the organization's digital transformation initiatives.

An example of a relevant case study is longitudinal research conducted by Kim *et al.*, (2023) in South Korea. They observed the implementation of a digital competency development program for ASN over three years and found that increasing digital competency not only improved employee performance in tasks involving technology, but also had a positive impact on motivation and overall job satisfaction. Employees who experience increased digital competency report higher levels of engagement and show greater initiative in proposing and implementing digital innovations in their workplace.

Furthermore, a comparative study by Mergel et al., (2023) in several OECD countries revealed that government organizations that successfully integrated digital competency development into their HR management strategies demonstrated higher levels of digital readiness. This research found that a holistic approach in developing digital competencies, which includes technical training, conceptual understanding of digital transformation, and development of soft skills such as adaptability and continuous learning, is correlated with increased positively employee motivation and performance in the e-government context.

Meanwhile, research by Azmi *et al.*, (2022) in Malaysia explores the complex interactions between digital competence, employee motivation, and ASN performance in implementing smart governance. They found a mutually reinforcing effect between digital competence and employee motivation; increased digital competence drives motivation to engage further in digital initiatives, while high motivation encourages employees to proactively improve their digital competence. These two factors together contribute significantly to improving employee performance in the context of government digital transformation.

H4: Digital competence has a positive impact on employee motivation.

H5: Digital competence has a positive impact on the performance of civil servants.

RESEARCH METHODS

This study focuses on quantitative assessment of transactional leadership style, digital competence, employee motivation, and civil servant performance. Transactional leadership style was measured using a scale developed by Pearce and Sims (2002) and Somech (2005) (Munsamy *et al.*, 2023). Digital competency was assessed based on a study by Khan *et al.*, (2020) (Munsamy *et al.*, 2023). Employee motivation was measured using the Utrecht Work Engagement Scale (UWES) developed by Schaufeli *et al.*, (2002) (Chauhan, 2023). Data collection involved questionnaires to gather

insights into these variables, aiming to understand the interactions between leadership style, digital literacy, engagement and performance in the public sector.

In the field of public administration, measuring the performance of civil servants is very important to improve the quality of governance and services (Furculița, 2023). To ensure the validity and reliability of data collection instruments, studies such as the Global Survey of Public Servants (GSPS) have become essential, providing detailed data on public officials' attitudes and experiences with management practices (Castelo & Gomes, 2023; Schuster *et al.*, 2023).

In addition, the development of digital measurement instruments, such as OSTMonp, has played an important role in assessing factors such as job satisfaction, transformational leadership, and work motivation on civil servant performance, with rigorous validity and reliability tests ensuring the accuracy of the data collected (Schuster *et al.*, 2023). By adopting and adapting established instruments such as those of Vigoda-Gadot *et al.*, (2008), questionnaires adapted to the specific study context were used for data collection, either online or offline, among a selected sample of civil servants, thereby contributing to a more comprehensive understanding of public sector dynamics and performance measurement practices.

Partial least squares structural equation modeling (PLS-SEM) technique is used in this study. SmartPLS is used because it can simultaneously analyze complex structural models including latent variables and formative and recursive indicators. The analysis steps include evaluation of the outer model to assess construct validity and reliability, evaluation of the inner model to test the relationships between latent variables, and testing the mediation effects using a bootstrap procedure. The results of the SmartPLS analysis provide information on the significance of path coefficients, R-squared values, and effect sizes to comprehensively test the research hypotheses.

RESULTS

Respondent characteristics

A picture of an office with an even group of male and female employees, most of them between the ages of 25 and 45, with some over the age of 45. These employees have a bachelor's degree or even higher, indicating a high level of education, and among these employees, some have worked for more than five years, while others have less experience in public administration or local tax affairs. They work in various positions, from staff, sub-section heads, sub-field heads, section heads, to secretaries, which show different hierarchies in the organization. Despite having diverse educational backgrounds, the majority of them have degrees in economics or accounting, which is very relevant to their work at the Semarang City Transportation Agency.

Table 1 below is a detailed demographic profile of the 105 respondents in the sample.

Table 1: Demographic Profile of Respondents

Respondent Profile	•	Frequency	Percent
Gender	Man	52	49.5
	Woman	53	50.5
Educational background	Economic accounting	78	74.3
	Law	2	1.9
	Other	17	16.2
	Social	5	4.8
	Technique	3	2.9
Last education	Diploma (D3)	14	13.3
	Bachelor degree)	59	56.2
	High school/equivalent	11	10.5
	Strata 2 (Master)	21	20.0
Position	Head of Subdivision/Head of Subdivision/Ksubdie/Kasi	9	8.6
	Other	93	88.6
	Secretary/Head of Division/Head of Division	3	2.9
Length of work	? 21 years	46	43.8
	15 years	13	12.4
	11 - 15 years old	14	13.3
	16 - 20 years old	27	25.7
	8 - 10 years	5	4.8
Age	? 51 years old	34	32.4
	20 - 30 years	11	10.5
	31 - 40 years old	18	17.1
	41 - 50 years old	60	40.0

Table 1 shows that the respondents consisted of 49.5% men and 50.5% women, so the composition was quite balanced. Most respondents (74.3%) have an educational background in Economics/Accounting, the majority (56.2%) have a Bachelor's degree (S1), the majority (88.6%) have other positions not mentioned, the majority (43.8%) have worked for 21 years or more, and the majority (40%) are between 41-50 years old.

In general, this data describes the profile of respondents who are dominated by individuals with an educational background in Economics/Accounting, a Bachelor's degree (S1), have other positions not

mentioned, have worked for more than 21 years, and are aged between 41-50 years.

Validity and reliability

Validity refers to the measurement of a construct. In SEM, convergent validity is usually evaluated based on the factor loading values of the indicators that measure the construct. The recommended loading factor value is >0.5. Meanwhile, reliability refers to the consistency of construct measurement. Reliability is tested with AVE (Average Variance Extracted), the recommended AVE value is above 0.5 and composite reliability, the recommended value is above 0.7.

Table 2: Validity and reliability criteria for each construct

Concept	Indicator	Loadings	Cronbach's Alpha	AVE	Composite reliability
Transactional	Set clear expectations and provide rewards for	0.885	0.895	0.761	0.927
Leadership	achieving targets				
	Actively monitor performance and take corrective	0.897			
	action when deviations from standards occur.				
	Explain employee roles and responsibilities in the 0.815				
	context of digital transformation				
	Emphasizes compliance with established standards	0.889			
	and procedures, especially in the context of technology				
	adoption				
Digital	ASN's ability to search, evaluate and manage digital	0.877	0.881	0.678	0.913
Competence	information.				
	ASN's ability to communicate and collaborate using	0.839			
	digital technology.				
	ASN's ability to create and edit digital content	0.862			

Concept	Indicator	Loadings	Cronbach's Alpha	AVE	Composite reliability
	ASN understanding and practices related to digital security	0.744			
	ASN's ability to identify needs and solve technical problems	0.787			
Employee	The internal drive of employees to do their work	0.872	0.844	0.762	0.906
Motivation	Employee motivation oriented to the public interest	0.846			
	Motivation that comes from external factors.	0.900			
Civil Servant	Complete tasks according to provisions	0.761	0.852	0.692	0.900
Performance	Results meet specified quality standards.	0.837			
	Providing the best service to the community	0.844			
	Receive input and criticism	0.880			

From Figure 1 and Table 2, we can see that more than 70% of the variance of each indicator can be explained by the variables in this study. Overall, all latent variables can explain the variance of the data. The composite reliability values of the four latent variables have a composite reliability greater than 0.6. This means that the specified indicators can measure every latent variable adequately or it can be said that the measurement model is reliable.

The good convergent validity values are also reflected in the high correlations between the indicators that make up the construct. Since the AVE values of the five latent variables have values greater than the minimum criterion, i.e., 0.5, it can be said that the convergent validity measures are good or meet the criteria for convergent validity. The next criterion is discriminant validity by comparing the correlations between constructs with the AVE root or Fornell-Lacker criteria in Table 3.

Table 3: Fornell-Lacker Criteria

Path	Transactional Leadership	Digital Competence	Employee Motivation	Civil Servant Performance
Transactional Leadership	0.873			
Digital Competence	0.494	0.872		
Employee Motivation	0.744	0.543	0.832	
Civil Servant Performance	0.671	0.490	0.727	0.823

^{***}Fornell-Lacker Criteria should be more than the correlation value of that construct

Based on Table 3, all constructs meet the Fornell-Lacker criteria, indicating that all constructs are valid and reliable.

Inner Model Assessment

The feasibility of the model is tested using the r^2^ value. The analysis result of r^2^ value of employee engagement was 0.486. This figure shows that 48.6% of the variability of endogenous variables can be explained by the variability of exogenous variables while the r^2^

value of employee performance is 0.665. This figure explains that 66.5% of the variability of endogenous variables can be explained by the variability of exogenous variables.

In addition to r^2 , the influence of exogenous variables on endogenous variables was also investigated which can be seen from the effect size values f^2 and Q^2 shown in Figure 1 and Table 4.

Table 4: r-square, f-square, Q and q-square

Construct	r-square*)	f-square**)	Q-square ***)
Employee Motivation	0.486		
Civil Servant Performance	0.665		

^{*)} Path with r-square less than 0.5 considered as weak predictive accuracy; **) path with an f-square above 0.35 is considered large; ***) path q-square more than 0.25 is considered medium predictive relevance

Table 5 data shows that Employee Motivation has an f-square value of 0.486 > 0.35, meaning that the independent variable has a large effect/influence on the Employee Motivation construct. Meanwhile, for Civil

Servant Performance, the q-square value is 0.665 > 0.25, meaning the model has good predictive relevance (more than moderate) in predicting the Civil Servant Performance construct.

Hypothesis test

The results of path coefficients (path betas) and t-statistics obtained through bootstrapping with a sample size of 234 are shown in Figure 1 and Table 5.

	Table 5	5: Path	beta,	t-value,	and l	P-value
--	---------	---------	-------	----------	-------	---------

Path	Path beta	t-value	P-value	Results
Employee Motivation (Z)→Civil Servant Performance (Y)	0.420	0.085	0,000	Accepted
Transactional Leadership $(X1) \rightarrow Employee Motivation (Z)$	0.217	0.092	0.019	Accepted
Transactional Leadership $(X1)\rightarrow Civil$ Servant Performance (Y)	0.154	0.096	0.110	Not Accepted
Digital Competence (X2)→Employee Motivation (Z)	0.565	0.119	0,000	Accepted
Digital Competence (X2)→Civil Servant Performance (Y)	0.370	0.098	0,000	Accepted

Table 5 shows that employee motivation has a significant effect on civil servant performance (P-value < 0.05), transactional leadership has a significant effect on employee motivation (P-value < 0.05), but does not have a significant effect on civil servant performance (P-value > 0.05). Digital Competence has a significant effect on employee motivation and civil servant performance (P-value < 0.05).

From these results it can be concluded that employee motivation, transactional leadership, and digital technology literacy have a significant influence on related variables, except for the path from Visionary-Participatory Leadership to Civil Servant Performance which is not significant.

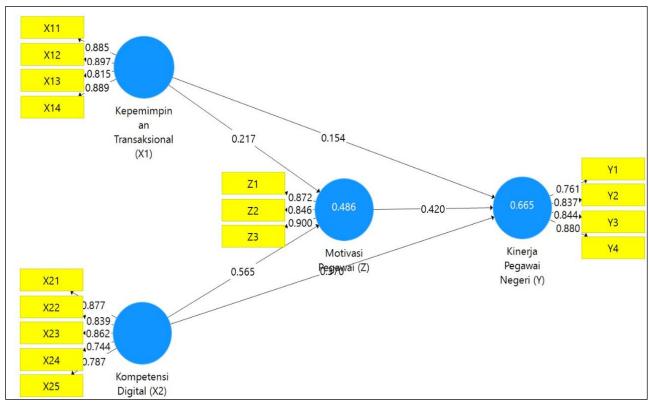


Figure 1: Path diagram and loading factor values

Figure 1 shows the influence value Employee Motivation to Civil Servant Performance 0.420 with a p value of 0.000. Pinfluence Transactional Leadership to Employee Motivation 0.217 with a p value of 0.019, against Civil Servant Performance 0.154 with a p value of 0.110. Influence Digital Competence to Employee Motivation 0.565 with a p value of 0.000, against performance of civil servants 0.370 with a p value of 0.000.

DISCUSSION

The influence of employee motivation on employee performance

Employee motivation is consistently identified as an important factor influencing employee performance in various organizational settings. Recent research by Perry *et al.*, (2021) emphasizes the importance of public service motivation as a unique factor that drives ASN performance. The study shows that employees with high public service motivation tend

to have higher commitment and performance in serving the community. In this sense, Kim and Fernandez (2022) found that employee motivation acts as a mediator between leadership style and organizational performance in the context of digital transformation in government.

These results are consistent with the general idea that motivated employees tend to perform better. The path coefficient of 0.420 and p-value < 0.001 shown in the question indicates that there is a statistically strong significant relationship between employee motivation and employee performance, highlighting the importance of promoting motivation to organizational success.

Employee motivation, as highlighted in various research papers (Punj, 2023 & 2023; Sun & Bunchapattanasakda, 2019), is indeed an important element in the development of effective human resources. Motivated employees demonstrate high levels of commitment, participation, and enthusiasm for their organization's goals and values, leading to increased productivity and performance.

This increased motivation and enthusiasm allows employees to make a significant contribution to the achievement of organizational goals, which is especially important in the public sector where the delivery of quality services that are responsive to community needs is paramount. By encouraging employee engagement through a variety of practices and strategies, organizations can increase employee satisfaction, reduce turnover rates, and ultimately drive success by aligning individual efforts with the organization's overarching mission.

Employee motivation is indeed a multifaceted concept that includes cognitive, emotional, and behavioral dimensions as highlighted by Macey *et al.*, (2009) (Ngozi & Edwinah, 2022). Cognitively motivated employees demonstrate a clear understanding of their roles and responsibilities in the organization, while emotional motivation signals strong attachment and enthusiasm for their work (Viterouli *et al.*, 2022). This emotional connection often leads to positive emotions such as happiness and joy, contributing to better health and increased competence, ultimately aiding in talent retention (Albrecht *et al.*, 2023).

Additionally, behavioral motivation plays an important role in encouraging employees to go above and beyond and put in extra effort which is correlated with increased performance and productivity (Huang *et al.*, 2022). Organizations that encourage all three aspects of motivation are more likely to experience increased employee satisfaction, reduced turnover rates, and overall business success.

Empowering civil servants through increasing motivation is very important to grow a professional bureaucracy with integrity (Nanda Vebryna *et al.*, 2023).

This empowerment increases employee well-being and job satisfaction, leading to higher levels of commitment and loyalty to the organization (Muhammad & Husen, 2019). In addition, the ethical behavior of state civil servants is influenced by factors such as honesty, motivation, environmental conditions, and codes of ethics (Wood et al., 2020). The reputation of civil servants plays an important role in shaping the overall reputation of the state apparatus, highlighting the importance of maintaining a positive image through ethical behavior and effective service delivery (ARK A et al., 2023). Therefore, by promoting motivation, ensuring ethical behavior, and prioritizing employee training and development, the state apparatus can cultivate a workforce that is dedicated and committed to providing optimal services to the community.

Employee motivation also plays an important role in improving the performance of public sector organizations and achieving their goals. Research by Sabekti & Setiawan (2023) highlights the mediating role of employee motivation in improving employee performance through training and rewards. Miawati et al., (2022) emphasized the importance of organizational culture and servant leadership in encouraging health worker engagement in public hospitals. Additionally, Viterouli et al., (2022) underscore the importance of factors such as work environment, leadership, training, and compensation in encouraging employee engagement and preventing turnover in multinational companies. Furthermore, Gan et al., (Deepalakshmi et al., 2024) emphasized the positive impact of Public Service Motivation (PSM) on job satisfaction, organizational commitment, and turnover intention through employee motivation.

By creating a conducive work environment, offering self-development opportunities, and implementing a participative leadership style, organizations can increase employee engagement, motivation, and overall performance, in line with Sudibyo and Mukzam's recommendations.

The Influence of Transactional Leadership Style on Employee Commitment and Performance

The study shows that transactional leadership style has a significant positive impact on employee motivation, supporting previous research (Njoku & Guillermo, 2023; Soetirto et al., 2023). In particular, the path coefficient of 0.217 and p-value of 0.019 highlight the importance of a leadership style that embraces employee engagement and provides a clear vision to increase employee motivation. However, the same leadership style does not have a significant direct impact on executive performance, with a path coefficient of 0.154 and p-value of 0.110. This suggests that the impact of leadership style on employee performance is fully mediated by employee motivation, highlighting the important role of motivation in transforming leadership

behavior into better performance outcomes (Juma *et al.*, 2023; Alamri, 2023).

Research findings from various studies provide insight into the relationship between leadership style, motivation, and employee performance. While transactional leadership style has been shown to significantly influence employee motivation (Soetirto *et al.*, 2023), the direct impact on civil servant performance may not be statistically significant (Ismuhadjar *et al.*, 2017).

This shows that the influence of transactional leadership on employee performance is fully mediated by employee motivation (Rabuana & Yanuar, 2023). Employee motivation, as highlighted by Saks (2006), acts as an important link between organizational factors such as leadership and work outcomes such as performance (Aferi *et al.*, 2023).

Therefore, it can be concluded that in the context of public services, the effectiveness of transactional leadership in improving employee performance operates primarily through increasing employee motivation, indicating the importance of encouraging motivation to encourage increased performance.

The performance of civil servants is influenced by various factors beyond just leadership style. Research shows that factors such as competence, motivation, work environment, and reward systems play an important role in shaping employee performance (Son & Vy, 2022; Arisman, 2022; Widayanto & Nugroho, 2022; Stocks, 2016; Tamimi & Sopiah, 2022).

The study highlights the importance of organizational culture, recruitment and selection processes, and leadership in improving employee performance, emphasizing the need for attention to reward management factors to improve overall performance in public organizations. In addition, the interaction between leadership, organizational culture, work competence, and work motivation can have a significant impact on employee performance, with leadership and organizational culture indirectly influencing performance through the mediation of work motivation.

Additionally, the presence of a conducive work environment, coupled with an effective leadership style and high work motivation, positively influences employee performance, underscoring the importance of aligning these factors for improved organizational outcomes.

Although a transactional leadership style can increase motivation, these other factors must also be considered to ensure improved performance of civil servants. The influence of leadership style on employee

performance can also vary depending on the organizational context and existing work culture. In a government bureaucratic environment that tends to be hierarchical and bureaucratic, a transactional leadership style may not be enough to directly improve the performance of civil servants (Vigoda-Gadot *et al.*, 2008).

However, these findings do not reduce the importance of transactional leadership style in increasing employee motivation, which will ultimately contribute to improving the performance of civil servants. Leaders who involve employee participation and present a clear vision can create a work environment that supports employee motivation, which is an important factor for improving overall organizational performance.

The Influence of Digital Competence on Employee Commitment and Performance

Digital competence is proven to have a significant positive influence on employee motivation (path coefficient 0.565, p <0.001) and also on the performance of civil servants (path coefficient 0.370, p <0.001). This finding is in line with previous research which states that digital competence is an important factor in increasing employee motivation and performance in the current digital era (Hendarwan *et al.*, 2022; Khan *et al.*, 2020; Van Laar *et al.*, 2017).

Employees who have good digital technology competence can utilize technology effectively in carrying out their duties and responsibilities, thereby increasing their motivation and performance.

In today's digital era, digital literacy stands out as an important competency for civil servants, as highlighted by various research papers (Aji Nugroho *et al.*, 2023; Ilmu *et al.*, 2022). Civil servants need to have the ability to effectively use and utilize digital technology to improve their performance and productivity in fulfilling their duties and responsibilities.

The study emphasizes that digital competence is essential for optimizing administrative procedures, ensuring transparency, and improving achievement systems in local governments. Digital literacy allows civil servants to immediately respond to citizens' needs, participate in competency development programs, and undergo transparent performance assessments.

In addition, integrating digital competencies into the personnel management system facilitates the implementation of the merit system and accelerates the progress of civil servants in the digital society era. Therefore, increasing digital literacy among civil servants is critical to their effectiveness and success in the evolving digital landscape.

Therefore, these findings underline the importance of increasing digital competence for civil

servants as an effort to empower state officials. With good digital literacy, civil servants will be more involved in their work and can provide better performance in serving the community.

CONCLUSION

This study examines the impact of transactional leadership style and digital competency on employee motivation and performance of Semarang City Transportation Service Department. Based on the data analysis conducted, several important conclusions were reached regarding the research hypotheses.

First, the first hypothesis that employee motivation has a positive impact on civil servant performance is accepted (H1 is accepted). This outcome is consistent with previous studies that highlighted the importance of employee motivation in increasing productivity, work quality, and organizational commitment.

Second, the second hypothesis that transactional leadership style has a positive impact on employee motivation is accepted (H2 is accepted). However, the third hypothesis that transactional leadership style has a positive effect on executive performance is rejected (H3 is rejected). These results indicate that the effect of transactional leadership style on executive performance is fully mediated by employee motivation.

Third, the fourth hypothesis which states that digital competence has a positive effect on employee motivation is accepted (H4 is accepted). Furthermore, the fifth hypothesis which states that digital competence has a positive effect on the performance of civil servants is also accepted (H5 is accepted).

The findings of this research emphasize the importance of increasing employee motivation in an effort to improve the performance of civil servants. Therefore, government organizations need to develop strategies and programs that can encourage employee motivation, such as creating a conducive work environment, providing opportunities for self-development, and implementing a transactional leadership style.

Government organizations also need to pay attention to the leadership style applied, especially in terms of adopting a transactional leadership style. By providing a clear vision and involving employees in decision making, leaders can increase employee motivation, which in the end will contribute positively to improving organizational performance.

It has been proven that digital literacy has a positive impact on the motivation and performance of civil servants. Therefore, government agencies should

provide training and capacity development to improve the digital literacy of civil servants.

This study contributes theoretically by expanding the understanding of factors influencing the motivation and performance of civil servant employees in the context of government organizations in the digital era. The findings support and strengthen previous theories that highlight the importance of transactional leadership style, digital capabilities, and employee motivation in improving organizational performance

Research Weaknesses and Recommendations for Further Research:

This research was only conducted in one government agency, so the generalization of the research results is limited. Future research can expand the scope of research by involving more government agencies or comparing between agencies, as well as exploring the mediating or moderating role of other variables that may be relevant in the relationship between leadership style, digital competence, employee motivation, and civil servant performance. A qualitative or mixed methods approach can be considered in future research to gain a deeper understanding of the phenomenon under study.

Therefore, this article delves into the impact of transactional leadership style and digital literacy on employee motivation and performance of Semarang City Transport Department. This study provides important insights into the importance of motivating employees, adopting appropriate leadership styles, and enhancing digital skills to improve the performance of government organizations in the digital era.

REFERENCES

- Priya, R., & Malarkodi, K. (2023). A Study on Employee Engagement Practices with Special Reference Maaya Software Solution Pvt Limited Namkkal. *International Journal For Multidisciplinary Research*, 5(3), 3–6. https://doi.org/10.36948/ijfmr.2023.v05i03.3150
- Aji Ratna KusumaA, Santi RandeB, Kus Indarto & Servant, C. (2023). Strategy To Increase The Capability Of Civil Servant (Asn) Resources Article history: Keywords: Capabilities; Strategy to Increase the Capability of Civil Servants (ASN) Resources Law number 43 of 1999 concerning the Principles of Civil Service focu. February, 1–18.
- Sabale Anjali Abasaheb, Rajagopal Subashini (2023). Maneuvering Of Digital Transformation: Role Of Artificial Intelligence In Empowering Leadership - An Empirical Overview Article history: Keywords: Digital Transformation; Maneuvering of Digital Transformation: Role of Artificial Intelligence in Empow. 1–18.
- Abduraimi, PB, Mustafi, M., & Islami, X. (2023). the Role of Organizational Culture on Employee Engagement. Business: Theory and Practice, 24(1),

- 109-122. https://doi.org/10.3846/btp.2023.17241
- Aferi, A., Amali Rivai, H., & Lukito, H. (2023). The
 Effect of Transformational Leadership Style on
 Organizational Commitment, Employee
 Engagement, and Employee Performance at Pt. Pln
 (Persero) Up3 Bukittinggi. Journal of Economics,
 Finance and Management Studies, 06(05), 135–142.
 https://doi.org/10.47191/jefms/v6-i5-10
- Aji Nugroho, A., Sri Rahayu, N., & Ranintya Yusuf, R. (2023). The Role of e-Government to Improve the Implementation of Merit System in Indonesian Local Governments. KnE Social Sciences, 2023(2023), 516–542. https://doi.org/10.18502/kss.v8i11.13570
- Alamri, M. (2023). Transformational leadership and work engagement in public organizations: promotion focus and public service motivation, how and when the effect occurs. Leadership & Organization Development Journal, 44(1), 137–155. https://doi.org/10.1108/LODJ-12-2021-0544
- Albrecht, S. L., Furlong, S., & Leiter, M. P. (2023). The psychological conditions for employee engagement in organizational change: Test of a change engagement model. Frontiers in Psychology, 14(January), 1–11. https://doi.org/10.3389/fpsyg.2023.1071924
- Alsulaimani, B., & Islam, A. (2022). Impact of 4IR Technology and its Impact on the Current Deployment. International Journal of Computer Science and Information Technology, 14(4), 53–67. https://doi.org/10.5121/ijcsit.2022.14405
- Arisman. (2022). The Effect of Leadership Style and Motivation on Employee Performance. Civil Multidisciplinary Journal, 2(5), 2389–2404. https://doi.org/10.55927/mudima.v2i5.388
- Ayu Mayangsari Riyadi, R. (2023). Effectiveness of Competence Development of State Civil Apparatus on Civil Servant Performance of Witness and Victim Protection Agency. KnE Social Sciences, 2023(1), 643–657. https://doi.org/10.18502/kss.v8i11.13579
- Briggs, C., Howarth, M., Fisher, R., Sorace, M., & Yu, Z. (2020). Digital skills in further education and the role of tutor: A staff development approach. Journal of Computer Assisted Learning, 36(5), 634–646. https://doi.org/10.1111/jcal.12436
- Castelo, S. L., & Gomes, C. F. (2023). The role of performance measurement and management systems in changing public organizations: An exploratory study. Public Money and Management. https://doi.org/10.1080/09540962.2023.2204400
- Chauhan, S. (2023). A comparative analysis of the impact of leadership style on organizational performance in the private and public sectors of banks. PsychologyandEducation, 55(1), 377–383. https://doi.org/10.48047/pne.2018.55.1.47
- Chunhui, L., Azar, AS, & Ahmad, A. (2023). The Effects of Charismatic Aspects of Transformational Leadership on Personal Outcomes: An Empirical Literature Review. Education Quarterly Reviews,

- 6(2). https://doi.org/10.31014/aior.1993.06.02.750
- Çini, M.A., Erdirençelebi, M., & Akman, A.Z. (2023). the Effect of Organization Employees' Perspective on Digital Transformation on Their Technostress Levels and Performance: a Public Institution Example. Central European Business Review, 12(4), 33–57. https://doi.org/10.18267/j.cebr.331
- Deepalakshmi, D.N., Tiwari, D.D., Baruah, D.R., Seth, A., & Bisht, R. (2024). Employee Engagement and Organizational Performance: A Human Resource Perspective. Educational Administration: Theory and Practice, 30(4), 5941–5948. https://doi.org/10.53555/kuey.v30i4.2323
- Fahruddin, F., Jusni, Ju., & Aswan, A. (2023). Mediating role of Work Engagement on the influence of Job Resources and Public Service Motivation on affective commitment in employees in Parakita Dental and General Clinic. International Journal of Multidisciplinary Approach Research and Science, 1(02), 253–262. https://doi.org/10.59653/ijmars.v1i02.107
- Fatima, T., Majeed, M., & Saeed, I. (2017). Does Participative Leadership Promote Innovative Work Behavior: The Moderated Mediation Model. Business & Economic Review, 9(4), 141–158. https://doi.org/10.22547/ber/9.4.7
- Firdaus, DR, Khairunnisa, K., Zohriah, A., & Fauzi, A. (2023). Analysis of Charismatic and Visionary Leadership Models in Islamic Boarding Schools. Journal on Education, 5(4), 15038–15049. https://doi.org/10.31004/joe.v5i4.2588
- Furculița, T. (2023). Performance Measurement Systems in Public Administration. Transformation of Economics, Finance and Management in the Context of World Globalization, 241–262. https://doi.org/10.30525/978-9934-26-307-1-12
- Gaibu, I. (2022). The Effect of Organizational Commitment, Leadership and Culture Toward Performance of ASN Employees in The Regional Secretariat of Kaltim District. Open Journal of Economics and Business, 3(1), 1–7. https://doi.org/10.33830/tjeb.v1i2.1263
- Gomes, J., &, & Sousa, M. J. (2021). Digital transformation in public services through gov.pt portal: Preliminary results from user's assessment. Lecture Notes in Computer Science, 12850 (pp. 361–373). https://doi.org/10.1007/978-3-030-85839-9_26
- Haryani, M., Idris, M., & Asiati, DI (2023). The Influence of Work Discipline, Motivation and Leadership on the Performance of ASN of the Public Works Department of Highways and Spatial Planning of South Sumatra Province. Journal of Social Sciences, Management, Accounting and Business, 4(2), 39–50. https://doi.org/10.47747/jismab.v4i2.1170
- Hooi, L. W., & Chan, A. J. (2023). Does workplace digitalization matter in linking transformational

- leadership and innovative culture to employee engagement? Journal of Organizational Change Management, 36(2), 197–216. https://doi.org/10.1108/JOCM-06-2022-0184
- Huang, S.Y.B., Huang, C.H., & Chang, T.W. (2022). A New Concept of Work Engagement Theory in Cognitive Engagement, Emotional Engagement, and Physical Engagement. Frontiers in Psychology, 12(February), 1–5. https://doi.org/10.3389/fpsyg.2021.663440
- Huma, E., Nduku, E., & Mwalw'a, S. (2023). Relationship between Visionary Leadership and implementation of Change Management strategies in Private Secondary Schools in Nairobi County. Journal of Education, 6(1), 21–38. https://doi.org/10.53819/81018102t6049
- Ilmu, K., Negara, A., Taufik, ©2020. Mohammad, Fauzi, A., Rahmat, B., Akbar, IP, Taufik, M., Rahmat, A., Irawan, B., & Akbar, P. (2022). NATAPRAJA JOURNAL: Study of State Administration Science. 10(01), 125–137.
- Ina Mega Nuryati, & Wisdom of Wisdom. (2023). The Influence Of Performance Benefits And Work Discipline On The Performance Of The State Civil Apparatus. International Conference on Digital Advances Tourism, Management and Technology, 1(1), 267–273. https://doi.org/10.56910/ictmt.v1i1.69
- Ismuhadjar, Purba, TP, Asha, MT, Kabul, ER, & Widodo, PS (2017). The influence of leadership style and organizational commitment and work motivation on employee performance. International Journal of Economic Research, 14(17), 283–290.
- Janowski, T. (2015). Digital government evolution: From transformation to contextualization. Government Information Quarterly, 32(3), 221–236. https://doi.org/10.1016/j.giq.2015.07.001
- Juma, LM, Ayub, SE, & Ali, U. (2023). Influence of Participative Leadership Style on Public Health Service Delivery in County Governments in the Western Kenya Region. African Journal of Empirical Research, 4(1), 116–132. https://doi.org/10.51867/ajernet4.1.10
- Kabakus, A. K., Bahcekapili, E., & Ayaz, A. (2023). The effect of digital literacy on technology acceptance: An evaluation on administrative staff in higher education. Journal of Information Science. https://doi.org/10.1177/01655515231160028
- CARASEL, N. (2023). Eğitim Yönetiminde Vizyoner Liderlik Yaklaşımı. International Journal of Social Sciences, 7(28), 380–393. https://doi.org/10.52096/usbd.7.28.25
- Ling, KC, Cheng, MLS, Ling, AYM, Sin, C.K., & Li, Z. (2023). Readiness of Digital Transformation

- among Malaysian Digital Talents. International Journal of Business and Management, 18(4), 161. https://doi.org/10.5539/ijbm.v18n4p161
- Mergel, I., Gong, Y., & Bertot, J. (2018). Agile government: Systematic literature review and future research. Government Information Quarterly, 35(2), 291–298. https://doi.org/10.1016/j.giq.2018.04.003
- Miawati, T., Notosudjono, D., & Sunaryo, W. (2022). Factors Affecting Health Workers' Engagement in Public Hospitals. Jhss (Journal of Humanities and Social Studies), 6(3), 306–309. https://doi.org/10.33751/jhss.v6i3.6217
- Muhammad, M., & Husen, L.O. (2019). State Civil Apparatus in Indonesia in the Conception of Welfare State: A Study of Legal Material Law Number 5 Year 2014 on State Civil Apparatus. Asian Social Science, 15(3), 64. https://doi.org/10.5539/ass.v15n3p64
- Munsamy, M., Dhanpat, N., & Barkhuizen, E.N. (2023). The development and validation of a digital leadership competency scale. Acta Commercii, 23(1), 1–15. https://doi.org/10.4102/ac.v23i1.1057
- Muntu, DF, Yuliana, OY, & Tarigan, ZJH (2023). The Influence of Digital Literacy on Learning Effectiveness Through Classroom Management. Petra International Journal of Business Studies, 6(1), 42–52. https://doi.org/10.9744/petraijbs.6.1.42-52
- Murtadho, MI, Rohmah, RY, Jamilah, Z., & Furqon, M. (2023). The Role Of Digital Literacy In Improving Students' Competence In The Digital Era. AL-WIJDÃN Journal of Islamic Education Studies, 8(2), 253–260. https://doi.org/10.58788/alwijdn.v8i2.2328
- Mustiningsih, M., Maisyaroh, M., & Ulfatin, N. (2019). The Role of the Principal's Visionary Leadership in Relation to Teachers' Readiness to Meet the Industrial Revolution 4.0. Journal of Educational Management and Supervision, 4(1), 101–112. https://doi.org/10.17977/um025v4i22020p101
- Nanda Vebryna, E., Sisca Damayanti, K., Diansiwi, P., Sari, PR, & Shobayarin, E. (2023). Ethics of State Civil Apparatus in Public Services in the Era of Bureaucratic Reform. Ethics of State Civil Apparatus in Public Services in the Era of Bureaucratic Reform. Journal of Governance and Administrative Reform, 4(1), 70–89. https://ejournal.unair.ac.id/JGAR/index
- Ngozi, D.-E., & Edwinah, A. (2022). Employee Engagement and Talent Retention: A Review. South Asian Research Journal of Biology and Applied Biosciences, 4(5), 188–197. https://doi.org/10.36346/sarjbm.2022.v04i05.003
- Njoku, H.I., & Guillermo, R.M. (2023). Leadership styles and employee engagement in the food industry of MSME's. Journal of Contemporary Research in Business, Economics and Finance, 5(2), 35–51. https://doi.org/10.55214/jcrbef.v5i2.211
- Nursanto, GA, Febrianto, A., Astuti, RK,

- Widhaningsih, V., Maulidia, H., & Hartati, B. (2023). Public Service Motivation Leveling in State Civil Apparatus within the Tangerang Class I Non TPI Immigration Office. J-MAS (Journal of Management and Science), 8(1), 1. https://doi.org/10.33087/jmas.v8i1.872
- Nuryadin, R., Sobandi, A., & Santoso, B. (2023).
 Digital Leadership in the Public Sector-Systematic Literature Review. Journal of Administrative Science: Media for the Development of Administrative Science and Practice, 20(1), 90–106. https://doi.org/10.31113/jia.v20i1.934
- Ohoiwutun, Y. (2023). Human Capital and State Civil Apparatus Development. East Asian Journal of Multidisciplinary Research, 2(6), 2273–2280. https://doi.org/10.55927/eajmr.v2i6.4662
- Pangrazio, L., & Sefton-Green, J. (2021). Digital Rights, Digital Citizenship and Digital Literacy: What's the Difference? Journal of New Approaches in Educational Research, 10(1), 15–27. https://doi.org/10.7821/NAER.2021.1.616
- Peng, J., Quan, J., & Yuan, M. (2020). Factors affecting digital transformation among Chinese manufacturing enterprises. International Journal of Environmental Research and Public Health, 17(17), 6025. https://doi.org/10.3390/ijerph17176025
- Phan, HT, Pham, TG, Pham, TM, & Lan Anh Ta. (2023). View of Impact of digital transformation...ng students at universities in VietNam.pdf. International Journal of Scientific Research and Management *IJSRM(, 11(3), 4689–4704.
- Poonvichaen, J., & Sutheejariyawat, P. (2022).
 Practicing Collaborative Teachers to Strengthen Students' Visionary Leadership Skills. Education Quarterly Reviews, 5(3), 231–245. https://doi.org/10.31014/aior.1993.05.03.541
- Prasetyo, A., & Palupi, M. (2023). High Performance of Human Resource Practice Towards Work Engagement: A Practice at a Government Public Office. JBTI: Business Journal: Theory and Implementation, 14(1), 273–286. https://doi.org/10.18196/jbti.v14i1.18361
- Punj, D. (2023). the Importance of Employee Engagement in Effective Management: an Empirical Study. PsychologyandEducation, 55(1), 590–598. https://doi.org/10.48047/pne.2018.55.1.72
- Rabuana, NKDN, & Yanuar, Y. (2023). The Influence of Work Environment and Work Engagement on Employee Performance Mediated by Employee Well-Being. Munaddhomah: Journal of Islamic Education Management, 4(3), 541–557. https://doi.org/10.31538/munaddhomah.v4i3.523
- Riska, D., & Donie, TFP (2022). Leadership Patterns in Improving the Quality of State Civil Apparatus (ASN) Training in the Human Resources Development Agency (BPSDM) of Riau Islands Province. STEERING: Journal of Government Science, 7(1), 85–101.

- https://doi.org/10.31629/kemudi.v7i1.4939
- Rochmawati, WH, & Indiyati, D. (2022). The influence of competency and demographics on employee performance at the ministry of religious affairs of Sragen Regency: A research framework. Sustainable Future: Trends, Strategies and Development, 2018, 223–226. https://doi.org/10.1201/9781003335832-56
- Sabekti, TS, & Setiawan, AI (2023). How to Improve Employee Performance Through the Role of Work Engagement Mediation Empirical Studies on Public Sector Organizations. Asian Journal of Engineering, Social and Health, 2(3), 205–218. https://doi.org/10.46799/ajesh.v2i3.45
- Schuster, C., Mikkelsen, K.S., Rogger, D., Fukuyama, F., Hasnain, Z., Mistree, D., Meyer-Sahling, J., Bersch, K., & Kay, K. (2023). The Global Survey of Public Servants: Evidence from 1,300,000 Public Servants in 1,300 Government Institutions in 23 Countries. Public Administration Review, 83(4), 982–993. https://doi.org/10.1111/puar.13611
- Schuster, C., Mikkelsen, K.S., Rogger, D., Fukuyama, F., Hasnain, Z., Mistree, D., Meyer-Sahling, J., Bersch, K., Kay, K., Rogger, D., & Schuster, C. (2023). The Global Survey of Public Servants: A Foundation for Research on Public Servants around the World. The Global Survey of Public Servants: A Foundation for Research on Public Servants around the World, March 2023. https://doi.org/10.1596/1813-9450-1033
- Sibarani, E., Sadalia, I., & Nazaruddin, N. (2023). The effect of employee engagement and training on employee performance through organizational commitment. International Journal on Social Science, Economics and Art, 12(4), 178–188. https://doi.org/10.35335/ijosea.v12i4.188
- Sidabutar, MSD, Suharyanto, A., & Kurniaty, EY (2023). The Effectiveness of the Performance of State Administrative and Population Civil Servants at the Bandar Sub-District Office, Simalungun Regency, North Sumatra Indonesia. Cognizance Journal of Multidisciplinary Studies, 3(5), 141–158. https://doi.org/10.47760/cognizance.2023.v03i05.0
 11
- Sitorus, G., Siregar, E., Hery Prasetya, G., & Nancy, L. (2023). the Role of Employee Engagement To Mediate the Influence of Organizational Culture and Workload Oneemployee Performance Pt. Alexis Citra Furnitama. International Journal of Advanced Research, 11(04), 640–647. https://doi.org/10.21474/ijar01/16705
- Soetirto, MM, Muldjono, P., & Hidayatulloh, FS (2023). The Influence of Leadership Style on Employee Performance Mediated by Job Satisfaction and Moderated by Work Motivation. International Journal of Social Services and Research, 3(6), 1517–1527. https://doi.org/10.46799/ijssr.v3i6.393

- Son, N.H., & Vy, P.T. (2022). Determinants influencing the performance of employees in public organizations: The case of Ho Chi Minh City Factors influencing employee performance in public organizations: Case study in Ho Chi Minh City.
- Souza, E.M. de M., & Pietrafesa, P.A. (2023).
 Leadership and Digital Transformation. Journal of Business Administration Research, 12(2), 9. https://doi.org/10.5430/jbar.v12n2p9
- Spante, M., Hashemi, S.S., Lundin, M., & Algers, A. (2018). Digital competence and digital literacy in higher education research: Systematic review of concept use. Cogent Education, 5(1), 1–21. https://doi.org/10.1080/2331186X.2018.1519143
- Stocks, N. (2016). *済無No Title No Title No Title*. 2021(3), 1–23.
- Sulila, I. (2022). The Impact of Bureaucratic Transformational Leadership and Organizational Culture in Public Sector on the Performance of State Civil Apparatus. Pulpit: Social and Development Journal, 38(1), 132–139. https://doi.org/10.29313/mimbar.v0i0.8809
- Sun, L., & Bunchapattanasakda, C. (2019).
 Employee Engagement: A Literature Review.
 International Journal of Human Resource Studies,
 9(1), 63. https://doi.org/10.5296/ijhrs.v9i1.14167
- Tamimi, M., & Sopiah, S. (2022). The Influence of Leadership Style on Employee Performance: A Systematic Literature Review. International Journal of Entrepreneurship and Business Management, 1(2), 128–138. https://doi.org/10.54099/ijebm.v1i2.360
- Thapliyal, P. (2023). Digital Literacy and Its Impact on the Inclination towards English Literature: An Analytical Study. Turkish Online Journal of Qualitative Inquiry, 11(2), 701–705. https://doi.org/10.52783/tojqi.v11i2.9993
- Toze, S., Roy, J., Sharaput, M., & Wilson, L. (2022).
 Smart Technologies, Digital Competencies, and Workforce Development. International Journal of Public Administration in the Digital Age, 8(1), 1– 19. https://doi.org/10.4018/ijpada.294121
- Utomo, WA, Udin, U., & Haryono, S. (2022). Visionary Leadership and Employee Quality in the Public Service Sector. International Journal of Applied Economics, Finance and Accounting, 12(2), 31–37. https://doi.org/10.33094/ijaefa.v12i2.542
- Van Wart, M., Roman, A., Wang, X. H., & Liu, C.
 (2017). Integrating ICT adoption issues into (e-)leadership theory. Telematics and Informatics,

- 34(5), 527–537. https://doi.org/10.1016/j.tele.2016.11.003
- Viterouli, M., Belias, D., Koustelios, A., & Tsigilis, N. (2022). Refining Employees' Engagement by incorporating Self-Directedness in Training and Work Environments. Proceedings of the European Conference on Management, Leadership and Governance, 2022-Novem(November), 414–422. https://doi.org/10.34190/ecmlg.18.1.870
- Widayanto, T., & Nugroho, SH (2022). The Influence Of Leadership, Organizational Culture, And Work Competence On Employee Performance Through Work Motivation. Pamator Journal: Trunojoyo University Scientific Journal, 15(2), 218–234.
 - https://doi.org/10.21107/pamator.v15i2.18807
- Widodo, G.Y. (2022). Visionary Leadership in Education and Training Organizational Capacity Development in the Era of Covid 19 Disruption and Industry 4.0. Pedagonal: Educational Scientific Journal, 6(1), 120–127. https://doi.org/10.55215/pedagonal.v6i1.5005
- Wood, J., Oh, J., Park, J., & Kim, W. (2020). The Relationship Between Work Engagement and Work–Life Balance in Organizations: A Review of the Empirical Research. Human Resource Development Review, 19(3), 240–262. https://doi.org/10.1177/1534484320917560
- Yansen, Y., & Yujie, Z. (2023). The Impact of Transformative Digital Leadership on Organizational Innovation: A Case Study of Successful Digital Transformation. International Journal of Advanced Research in Technology and Innovation, 5(1), 57–71. https://doi.org/10.55057/ijarti.2023.5.1.6
- Yaqub, M. Z., & Alsabban, A. (2023). Industry-4.0-Enabled Digital Transformation: Prospects, Instruments, Challenges, and Implications for Business Strategies. Sustainability (Switzerland), 15(11). https://doi.org/10.3390/su15118553
- Zavatin, I., Ene Constantin, A.B., Bujor, D., & Fraţiloiu, B.A. (2023). Study on the Impact of Organizational Culture, Knowledge Management and Digitalization on Sustainable Leadership. Proceedings of the International Conference on Business Excellence, 17(1), 1702–1715. https://doi.org/10.2478/picbe-2023-0152
- Хабаров, В. И. (2023). Information / Digitalization of economy д четвертой промышленной революции Digital transformation of business. 11– 16.