



The Influence of Organizational Digital Transformation and Technology-Based Reward–Punishment Systems on Civil Servant Performance Mediated by Work Discipline in the Government of Kolaka Regency

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ABSTRACT

This study aims to analyze the effect of Organizational Digitalization and Technology-Based Reward–Punishment Systems on Civil Servant (ASN) Performance, with Work Discipline as a mediating variable in the Government of Kolaka Regency. The increasing demand for efficient public services and accountable governance requires the implementation of digital transformation and performance-based management systems to enhance employee productivity and organizational effectiveness. This research employs a quantitative approach using a survey method. Data were collected through questionnaires distributed to 120 ASNs working in regional government institutions in Kolaka Regency. The data were analyzed using Partial Least Squares Structural Equation Modeling (PLS-SEM) to examine both direct and indirect relationships among the variables. The results indicate that Organizational Digitalization has a positive and significant effect on Work Discipline and ASN Performance. Similarly, the Technology-Based Reward–Punishment System shows a significant positive influence on both Work Discipline and ASN Performance. Work Discipline is proven to have a significant effect on ASN Performance and functions as a mediating variable in the relationship between Digitalization, the Reward–Punishment System, and Performance. The mediation analysis reveals that Work Discipline partially mediates the relationship between the independent variables and ASN Performance. These findings emphasize that strengthening digital governance systems combined with fair and technology-based reward–punishment mechanisms can improve work discipline and ultimately enhance ASN performance in supporting effective public administration.

Keywords: *ASN Performance, Organizational Digitalization, Reward–Punishment System, Work Discipline*

I. INTRODUCTION

Organizational performance in the public sector has become increasingly important in the era of digital transformation and bureaucratic reform. Governments are required to enhance efficiency, transparency, responsiveness, and accountability in delivering public services. The transition toward digital governance is not merely a technological shift but also a structural and cultural transformation that affects administrative procedures, communication systems, monitoring mechanisms, and decision-making processes. In this context, organizational digitalization plays a strategic role in improving workflow integration, accelerating information exchange, reducing bureaucratic delays, and supporting evidence-based policy implementation. The effective use of digital systems is expected to strengthen administrative performance and improve the productivity of Civil Servants (ASN).

In addition to digital transformation, the implementation of a technology-based reward–punishment system is considered an essential instrument in modern performance management. Such a system enables objective evaluation of employee performance through measurable indicators, strengthens accountability mechanisms, and promotes fairness in distributing incentives and sanctions. From a management perspective, performance-based reward systems contribute to shaping employee behavior, reinforcing goal alignment, and increasing motivation to achieve organizational targets. When properly implemented, technology-supported performance monitoring can create transparency and reduce subjectivity in evaluation processes.

Work discipline represents a critical internal factor in translating organizational strategies into measurable performance outcomes. Discipline reflects adherence to regulations, punctuality, responsibility, compliance with procedures, and consistency in completing assigned tasks. In public sector institutions, strong work discipline ensures that digital systems function effectively and that reward–punishment mechanisms are implemented consistently.

Without adequate discipline, technological systems and performance incentives may not produce optimal results. Therefore, work discipline is considered a key behavioral mechanism that can strengthen the impact of organizational digitalization and technology-based reward systems on employee performance.

At the regional level, including within the Government of Kolaka Regency, efforts to implement digital governance and performance-based management systems continue to develop in line with national bureaucratic reform policies. However, improvements in technology infrastructure alone may not automatically lead to enhanced performance outcomes. The success of digital transformation depends on employees' readiness, behavioral adaptation, and organizational culture. This highlights the importance of examining the mediating role of work discipline in linking digital transformation and reward-punishment systems to ASN performance.

Empirical studies indicate that organizational digitalization and structured incentive systems have positive effects on employee performance. Digital tools improve efficiency, while reward mechanisms encourage accountability and productivity. Nevertheless, existing research rarely examines work discipline as a mediating variable, particularly in local government contexts. Most studies focus on direct relationships, leaving the behavioral mechanism that explains how digital systems influence performance insufficiently explored. This research gap suggests the need for a more comprehensive model that incorporates work discipline as an intervening variable.

Addressing this gap, the present study aims to analyze the effect of organizational digitalization and technology-based reward-punishment systems on ASN performance through work discipline in the Government of Kolaka Regency. By examining both direct and indirect relationships, this study is expected to provide theoretical contributions to public sector performance literature and practical implications for strengthening digital governance, improving disciplinary culture, and optimizing performance management systems in local government institutions.

II. LITERATURE REVIEW

2.1 Organizational Digitalization

Organizational digitalization refers to the integration of digital technologies into organizational structures, strategies, and operational processes to improve efficiency, innovation, and value creation. According to Vial (2019), organizational digitalization is a transformation process driven by digital technologies that fundamentally changes organizational processes, structures, and value-creation mechanisms. This transformation enables organizations to redesign workflows, enhance coordination, and generate new forms of performance improvement through the strategic use of digital systems. In the public sector context, digitalization supports transparency, accountability, and more efficient service delivery.

The benefits of organizational digitalization include improved operational efficiency, faster administrative processes, enhanced transparency, data-driven decision-making, increased productivity, reduced costs, and strengthened organizational performance. Digital systems also help public institutions provide better services to stakeholders while ensuring accuracy and responsiveness in administrative management.

The scope of organizational digitalization covers the transformation of business processes through digital technologies, restructuring of organizational systems, integration of digital platforms, and the development of digital capabilities among employees. It also involves embedding digital strategies into organizational planning to ensure that technology adoption aligns with institutional goals.

Based on Vial (2019), the indicators of organizational digitalization include business process transformation, structural transformation, value creation through digital technologies, and the development of new digital capabilities. These indicators are widely used in recent research to measure the extent of digital transformation within organizations.

2.2 Technology-Based Reward-Punishment System

Technology-Based Reward-Punishment System refers to a performance management mechanism that utilizes digital technology to objectively measure employee performance and determine rewards or sanctions based on predefined standards. According to Armstrong (2020), a reward and performance management system is a structured approach designed to align employee behavior with organizational goals through fair evaluation, clear performance targets, and consistent feedback mechanisms. When integrated with digital technology, this system becomes more transparent, data-driven, and efficient in monitoring performance outcomes. The use of digital platforms enables real-time tracking, automated evaluation, and accurate documentation of employee achievements and compliance, thereby reducing subjectivity in performance assessment.

The benefits of a technology-based reward-punishment system include increased fairness in performance evaluation, improved accountability, enhanced motivation, stronger organizational discipline, and better alignment between individual performance and institutional objectives. In public organizations, such a system supports merit-based management, strengthens transparency, and encourages employees to achieve performance targets consistently. The scope of this system includes digital performance monitoring, automated evaluation processes, electronic reward distribution, data-based sanction mechanisms, and integrated performance reporting systems. It ensures that performance data are systematically recorded and analyzed to support objective managerial decisions.

Based on Armstrong (2020), the indicators of a reward system include clarity of performance goals, fairness of evaluation, consistency of feedback, alignment of rewards with performance outcomes, and transparency of performance standards. These indicators are commonly applied in contemporary performance management research to assess the effectiveness of technology-supported reward and punishment systems.

2.3 Work Discipline

Work Discipline refers to the level of employee compliance with organizational rules, procedures, standards, and behavioral expectations in performing job responsibilities. According to Robbins and Judge (2019), discipline is closely related to individual behavior within organizations, reflecting the extent to which employees adhere to established regulations, demonstrate responsibility, and maintain consistency in completing assigned tasks. Work discipline is considered a fundamental factor in ensuring organizational effectiveness because it supports order, accountability, and the achievement of performance targets. In public institutions, strong work discipline contributes to reliable service delivery, timely task completion, and improved overall organizational performance.

The benefits of work discipline include increased productivity, improved job performance, reduced errors, enhanced organizational stability, and strengthened professional responsibility. Discipline also helps create a positive work environment where employees understand expectations and comply with institutional policies. In government organizations, disciplined behavior ensures that administrative processes run efficiently and align with regulatory standards.

The scope of work discipline covers punctuality in attendance, adherence to organizational regulations, compliance with operational procedures, responsibility in task execution, and consistency in meeting deadlines. It also includes ethical behavior and commitment to organizational goals.

Based on Robbins and Judge (2019), the indicators of work discipline include attendance consistency, compliance with rules and procedures, punctuality in completing tasks, responsibility in job execution, and adherence to organizational standards. These indicators are widely used in organizational behavior research to measure employee discipline as a determinant of performance.

2.4 Civil Servant Performance

Civil Servant Performance refers to the level of achievement demonstrated by public employees in carrying out their duties and responsibilities in accordance with organizational goals and established standards. According to Robbins and Judge (2019), job performance is the measurable outcome of employee work behavior that contributes to organizational effectiveness. Performance reflects how well individuals complete assigned tasks, meet targets, and fulfill role expectations within the organization. In the context of public sector institutions, civil servant performance is closely related to service quality, accountability, productivity, and the ability to achieve institutional objectives efficiently and effectively.

The benefits of high civil servant performance include improved service delivery, increased organizational productivity, enhanced public trust, better achievement of government programs, and strengthened institutional credibility. Strong performance also supports the successful implementation of policies, particularly in environments undergoing digital transformation and bureaucratic reform. The scope of civil servant performance covers task accomplishment, work quality, efficiency, responsibility, cooperation, and adherence to organizational standards. It involves both individual contributions and alignment with institutional goals, ensuring that employees perform their duties effectively within the framework of public administration.

Based on Robbins and Judge (2019), the indicators of job performance include task performance quality, quantity of work, timeliness in completing tasks, effectiveness in carrying out responsibilities, and cooperation in the workplace. These indicators are widely used in organizational research to measure employee performance in both private and public sector contexts.

2.5 Conceptual Framework and Research Hypotheses

The conceptual framework examines the relationships among Organizational Digitalization, Technology-Based Reward–Punishment Systems, Work Discipline, and Civil Servant (ASN) Performance. It is based on the view that effective public sector performance requires the integration of digital transformation and performance-based management mechanisms to enhance employee behavior and organizational outcomes. Organizational Digitalization and Technology-Based Reward–Punishment Systems are positioned as independent variables that influence ASN Performance both directly and indirectly. Work Discipline functions as a mediating variable, explaining how digital systems and structured reward–punishment mechanisms shape employee discipline, which in turn improves performance. Through improved discipline, employees are more likely to comply with organizational standards, complete tasks effectively, and achieve performance targets. This integrated model suggests that strengthening digital governance and implementing fair, technology-based performance management systems can enhance work discipline and ultimately optimize ASN performance within the Government of Kolaka Regency.

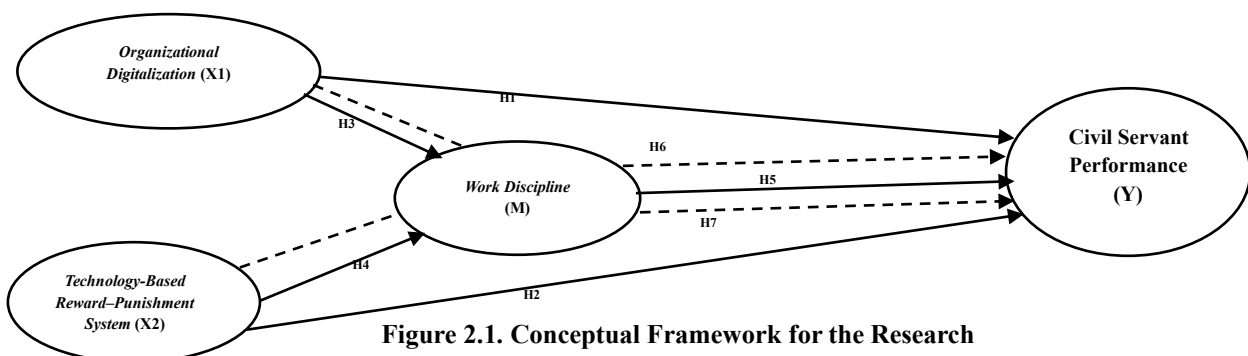


Figure 2.1. Conceptual Framework for the Research

2.6 Research Hypothesis

- H1:** Organizational Digitalization has a positive and significant effect on Civil Servant (ASN) Performance in the Government of Kolaka Regency.
- H2:** Technology-Based Reward–Punishment System has a positive and significant effect on Civil Servant (ASN) Performance in the Government of Kolaka Regency.
- H3:** Organizational Digitalization has a positive and significant effect on Work Discipline in the Government of Kolaka Regency.
- H4:** Technology-Based Reward–Punishment System has a positive and significant effect on Work Discipline in the Government of Kolaka Regency.
- H5:** Work Discipline has a positive and significant effect on Civil Servant (ASN) Performance in the Government of Kolaka Regency.
- H6:** Organizational Digitalization has a positive and significant effect on Civil Servant (ASN) Performance through the mediation of Work Discipline in the Government of Kolaka Regency.
- H7:** Technology-Based Reward–Punishment System has a positive and significant effect on Civil Servant (ASN) Performance through the mediation of Work Discipline in the Government of Kolaka Regency.

III. RESEARCH METHOD

This study was conducted in the Government of Kolaka Regency to examine the relationships among Organizational Digitalization, Technology-Based Reward–Punishment Systems, Work Discipline, and Civil Servant (ASN) Performance. The research employed a quantitative approach and was carried out over approximately six months. The population consisted of ASN working in regional government institutions in Kolaka Regency, with 120 respondents selected using a total sampling technique.

The study includes two independent variables, namely Organizational Digitalization and Technology-Based Reward–Punishment System, one mediating variable, Work Discipline, and one dependent variable, ASN Performance. Data were collected using questionnaires based on a five-point Likert scale, supported by relevant institutional documents and secondary data.

Data analysis was performed using descriptive and inferential statistics through Partial Least Squares–Structural Equation Modeling (PLS-SEM) with SmartPLS software. The analysis evaluated both the measurement model (outer model) and the structural model (inner model), including direct and indirect effects among variables. Model quality was assessed using R-square and Q-square values, while hypothesis testing was conducted through bootstrapping at a 5 percent significance level to determine the relationships among variables and the mediating role of Work Discipline.

IV. RESEARCH RESULT AND DISCUSSION

4.1 Research Result

Table 4.1. Direct Effect

Relationship Between Variables	Path Coefficient (β)	T-Statistic	P-Value	Description
Organizational Digitalization → ASN Performance	0,668	6,42	0,002	Significant
Technology-Based Reward–Punishment System → ASN Performance	0,713	8,37	0,000	Significant
Organizational Digitalization → Work Discipline	0,742	7,85	0,000	Significant
Technology-Based Reward–Punishment System → Work Discipline	0,801	9,10	0,001	Significant
Work Discipline → ASN Performance	0,856	15,20	0,000	Significant

Table 4.1 presents the results of the direct effect analysis among the variables in this study. The findings indicate that Organizational Digitalization has a positive and significant effect on ASN Performance, with a path coefficient of 0.668, a T-statistic value of 6.42, and a P-value of 0.002. This result confirms that higher levels of organizational digitalization contribute to improved performance of civil servants.

Similarly, the Technology-Based Reward–Punishment System has a positive and significant effect on ASN Performance, as indicated by a path coefficient of 0.713, a T-statistic of 8.37, and a P-value of 0.000. This demonstrates that the implementation of a technology-based performance management system effectively enhances employee performance. Regarding Work Discipline, the results show that Organizational Digitalization has a positive and significant influence, with a path coefficient of 0.742, a T-statistic of 7.85, and a P-value of 0.000. This suggests that digital systems support the improvement of employee discipline within the organization. In addition, the Technology-Based Reward–Punishment System also significantly affects Work Discipline, with a path coefficient of 0.801, a T-statistic of 9.10, and a P-value of 0.001, indicating that structured and technology-supported reward and sanction mechanisms strengthen employee discipline.

Finally, Work Discipline has the strongest positive and significant effect on ASN Performance, with a path coefficient of 0.856, a T-statistic of 15.20, and a P-value of 0.000. This finding highlights that disciplined work behavior

plays a crucial role in improving civil servant performance. Overall, all direct relationships in the model are positive and statistically significant, supporting the proposed hypotheses in this study.

Table 4.2. Indirect Effect

Construct	Indirect Effect	P-Value	Direct Effect	Mediation Effect	Type of Mediation
Organizational Digitalization → Work Discipline → ASN Performance	0,521	0,001	0,668	4,92	Partial Mediation
Technology-Based Reward–Punishment System → Work Discipline → ASN Performance	0,612	0,001	0,713	5,87	Partial Mediation

Table 4.2 presents the results of the mediation analysis examining the indirect effects of Organizational Digitalization and the Technology-Based Reward–Punishment System on ASN Performance through Work Discipline. The findings indicate that Organizational Digitalization has a significant indirect effect on ASN Performance through Work Discipline, with an indirect effect value of 0.521 and a P-value of 0.001. The mediation effect is supported by a T-statistic value of 4.92. Although the direct effect remains significant, the presence of a significant indirect effect confirms that Work Discipline partially mediates the relationship between Organizational Digitalization and ASN Performance. This suggests that digital transformation improves performance not only directly but also by strengthening employee discipline.

Similarly, the Technology-Based Reward–Punishment System demonstrates a significant indirect effect on ASN Performance through Work Discipline, with an indirect effect value of 0.612 and a P-value of 0.001. The mediation analysis shows a T-statistic value of 5.87, indicating statistical significance. Since the direct effect between the Technology-Based Reward–Punishment System and ASN Performance is also significant, Work Discipline functions as a partial mediator in this relationship. This finding implies that technology-based reward and sanction mechanisms enhance ASN Performance both directly and indirectly by reinforcing work discipline.

Overall, the results confirm that Work Discipline plays an important mediating role in strengthening the impact of Organizational Digitalization and Technology-Based Reward–Punishment Systems on ASN Performance in the Government of Kolaka Regency.

4.2 Discussion

The findings indicate that Organizational Digitalization has a positive and significant relationship with ASN Performance. This suggests that the implementation of digital systems in public administration improves efficiency, transparency, and work effectiveness. However, the impact of digitalization becomes more optimal when supported by strong Work Discipline among employees, as technology alone is not sufficient to ensure high performance outcomes.

The Technology-Based Reward–Punishment System also shows a positive and significant effect on ASN Performance, both directly and indirectly. The implementation of a structured and technology-driven performance management system encourages accountability, fairness, and motivation among civil servants. Nevertheless, the effectiveness of this system depends on consistent application and alignment with organizational regulations.

The study further confirms that Organizational Digitalization positively and significantly influences Work Discipline, indicating that digital work systems, monitoring platforms, and automated procedures help strengthen employee discipline. Similarly, the Technology-Based Reward–Punishment System has a positive and significant effect on Work Discipline, demonstrating that transparent evaluation mechanisms and performance-based incentives reinforce disciplined work behavior.

Moreover, Work Discipline significantly enhances ASN Performance, highlighting that disciplined employees are more likely to complete tasks effectively, meet targets, and comply with organizational standards. Work Discipline therefore serves as a key mechanism linking organizational policies to performance outcomes.

The mediation analysis reveals that Work Discipline plays an important intermediary role. The effect of Organizational Digitalization on ASN Performance is partially mediated by Work Discipline, meaning that digital transformation improves performance both directly and indirectly through strengthened discipline. Likewise, Work Discipline partially mediates the relationship between the Technology-Based Reward–Punishment System and ASN Performance. Overall, the results emphasize that integrating digital governance with fair, technology-based performance management systems is essential for improving work discipline and optimizing ASN performance in the Government of Kolaka Regency.

V. CONCLUSION AND SUGGESTIONS

5.1 Conclusion

Based on the results and discussion, the study concludes that Organizational Digitalization has a positive and significant relationship with ASN Performance, indicating that the implementation of digital systems contributes to improved efficiency, transparency, and work effectiveness within government institutions. However, the direct impact of digitalization on performance becomes more optimal when supported by strong Work Discipline among employees.

The findings also show that the Technology-Based Reward–Punishment System has a positive and significant effect on ASN Performance, demonstrating that structured, transparent, and technology-based performance management mechanisms contribute to improving employee accountability and motivation. In addition, both Organizational Digitalization and the Technology-Based Reward–Punishment System have a positive and significant influence on Work Discipline, meaning that digital work environments and performance-based evaluation systems encourage more disciplined behavior among civil servants.

Furthermore, Work Discipline has a significant positive effect on ASN Performance, emphasizing that disciplined work behavior is a fundamental factor in achieving high performance standards in public institutions. The mediation analysis reveals that Work Discipline partially mediates the relationship between Organizational Digitalization and ASN Performance, indicating that digital transformation improves performance both directly and indirectly through enhanced discipline. Similarly, Work Discipline partially mediates the relationship between the Technology-Based Reward–Punishment System and ASN Performance, showing that performance-based digital management strengthens outcomes through the improvement of employee discipline.

Overall, the findings highlight that integrating digital governance with fair and technology-based reward–punishment mechanisms is essential to strengthening work discipline and optimizing ASN performance in the Government of Kolaka Regency.

5.2 Suggestions

The study recommends strengthening the implementation of Organizational Digitalization by expanding the use of integrated digital systems, improving e-office platforms, enhancing data management, and ensuring reliable digital infrastructure within government institutions. Continuous development of employees' digital competencies is also essential to maximize the effectiveness of digital transformation in improving administrative efficiency and organizational performance.

The Technology-Based Reward–Punishment System should be implemented consistently and transparently to ensure fairness, accountability, and objective performance evaluation. Clear performance indicators, automated monitoring systems, and standardized evaluation procedures are necessary to strengthen the effectiveness of this system in motivating employees and supporting performance improvement.

Since Work Discipline plays a significant mediating role, government policies should prioritize the enhancement of employee discipline through consistent supervision, performance monitoring, leadership commitment, and the reinforcement of organizational regulations. Strengthening discipline will help ensure that digital systems and reward–punishment mechanisms translate effectively into improved ASN Performance. In addition, successful implementation requires strong synergy between digital governance and performance management systems, supported by continuous training programs, institutional support, and regular monitoring and evaluation to ensure policy effectiveness and adaptability to organizational needs.

Future research is encouraged to involve larger and more diverse samples across different government institutions to improve generalizability. Researchers may also consider incorporating additional variables such as leadership style, organizational culture, employee motivation, or job satisfaction to provide a more comprehensive explanation of ASN Performance. Longitudinal or mixed-method approaches are recommended to examine the long-term impact of digital transformation and performance management systems on public sector outcomes.

REFERENCES

- Armstrong, M. (2020). *Armstrong's handbook of reward management practice: Improving performance through reward* (6th ed.). Kogan Page.
- Baird, K., Su, S., & Munir, R. (2019). The relationship between the enabling use of controls, employee empowerment, and performance. *Accounting & Finance*, 59(2), 1113–1141.
- Bharadwaj, A., El Sawy, O. A., Pavlou, P. A., & Venkatraman, N. (2013). Digital business strategy: Toward a next generation of insights. *MIS Quarterly*, 37(2), 471–482.
- Demerouti, E., Bakker, A. B., Nachreiner, F., & Schaufeli, W. B. (2001). The job demands–resources model of burnout. *Journal of Applied Psychology*, 86(3), 499–512.
- OECD. (2023). *Digital government review 2023: Indonesia*. Organisation for Economic Co-operation and Development.
- OECD. (2024). *Going digital in government: Enhancing public sector performance*. Organisation for Economic Co-operation and Development.
- Podsakoff, P. M., MacKenzie, S. B., Lee, J. Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: A critical review. *Journal of Applied Psychology*, 88(5), 879–903.
- Robbins, S. P., & Judge, T. A. (2019). *Organizational behavior* (18th ed.). Pearson.
- Rogers, D. L. (2016). *The digital transformation playbook*. Columbia University Press.
- Rothwell, W. J., & Kazanas, H. C. (2019). *Strategic human resource development*. Routledge.
- Verhoef, P. C., Broekhuizen, T., Bart, Y., Bhattacharya, A., Dong, J. Q., Fabian, N., & Haenlein, M. (2021). Digital transformation: A multidisciplinary reflection and research agenda. *Journal of Business Research*, 122, 889–901.
- Vial, G. (2019). Understanding digital transformation: A review and a research agenda. *The Journal of Strategic Information Systems*, 28(2), 118–144.