

## The Influence of Digital Organizational Culture and Digital Competence on Employee Performance with Digital Transformation as an Intervening Variable in the Regional Revenue Agency of South Kalimantan Province

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### ABSTRACT

This study aims to analyze the influence of digital organizational culture and digital competence on employee performance with digital transformation as an intervening variable at the Regional Revenue Agency of South Kalimantan Province. The research approach uses a quantitative method with Partial Least Square-Structural Equation Modeling (PLS-SEM) analysis techniques on 59 respondents. The results show that digital organizational culture and digital competence have a significant effect on digital transformation, but do not directly affect employee performance. Digital transformation has a significant effect on employee performance and mediates the relationship between culture and digital competence on performance. This finding confirms that the success of employee performance in the digital era is highly dependent on the effectiveness of digital transformation as a catalyst between organizational values, individual capabilities, and work results

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## INTRODUCTION

Digital transformation has become a key strategic agenda for public organizations worldwide, including government agencies in Indonesia, in an effort to improve the effectiveness and efficiency of public services. The shift towards digital-based governance requires adjustments in structure, work culture, and human resource competencies (Westerman, Bonnet, & McAfee, 2014). In the context of public administration, the success of digital transformation depends heavily on the readiness of human resources and an organizational culture that supports innovation and the use of technology (Mergel, Edelman, & Haug, 2019). Therefore, digital organizational culture and digital competency are key factors determining employee performance in the era of digital governance.

Digital organizational culture reflects the values, norms, and beliefs that encourage the use of technology to create efficiency, collaboration, and data-driven decision-making (Buvat et al., 2017). A culture that is adaptive to digital technology serves as a driver of changes in employee behavior, enabling them to innovate and adapt to new work systems (Schein, 2010). In public organizations, digital culture not only shapes work methods but also influences levels of accountability and responsiveness to community needs (Cahyono, 2018). Therefore, the internalization of a strong digital culture is necessary for government agencies to transform comprehensively in the face of technological disruption. In addition to culture, employee digital competence is a fundamental element in supporting organizational performance in a digital bureaucratic environment. Digital competence is defined as an individual's ability to use information technology effectively, safely, and ethically in carrying out tasks (Ferrari & Punie, 2013). Employees with high digital literacy are able to manage data, collaborate online, and create technology-based innovations that accelerate work processes (van Laar et al., 2017). Studies by Brolpito (2018) and Setiawan et al. (2023) show that digital competence is positively related to productivity and work efficiency. However, findings by Baharrudin et al. (2021) confirm that digital competence does not always have a significant impact on performance without adequate system support and training. This indicates that digital competence requires a conducive organizational context to optimally contribute to employee performance.

transformation, as an intervening variable, plays a mediating role between digital organizational culture and digital competency and employee performance. This transformation is not only about technology adoption but also encompasses fundamental changes in paradigms, processes, and work models (Vial, 2019). In the Indonesian public sector, the implementation of systems such as e-Samsat is a concrete example of digital transformation aimed at accelerating motor vehicle tax services, increasing transparency, and reducing conventional bureaucratic practices (Hidayat & Prasetyo, 2019). Successful digital transformation will create a collaborative, adaptive, and efficient work ecosystem, ultimately improving employee performance (Sirait, 2021). Thus, digital transformation acts as a catalyst connecting digital culture and digital competency with improved individual and organizational performance.

The South Kalimantan Provincial Revenue Agency (Bapenda Kalsel) is one agency currently facing these challenges. Although regional tax revenues for 2022–2024 show a positive trend, some employees still show limitations in implementing digital technology and work culture. This phenomenon indicates a gap between individual readiness and the demands of organizational transformation. Therefore, a comprehensive understanding of how digital organizational culture and digital competency influence employee performance through digital transformation is necessary.

This research contributes to the human resource management and public administration literature by offering empirical evidence on the relationship between digital organizational culture, digital competency, digital transformation, and employee performance in the local government sector. Theoretically, this research extends the application of Dynamic Capabilities theory (Teece, Pisano, & Shuen, 1997), which emphasizes the importance of an organization's ability to adapt to technological change. Practically, the results of this study are expected to provide a basis for local governments in designing strategies to increase digital capacity and build an organizational culture that supports the success of sustainable digital transformation.

## LITERATURE REVIEW

The literature over the past five years confirms that digital organizational culture is not simply the application of technology but rather a set of values, practices, and assumptions that facilitate data-driven decision-making, cross-functional collaboration, and a “digital-first” mindset that accelerates the adoption of organizational innovation. Recent systematic reviews of the characteristics of digital organizational culture demonstrate the consistency of attributes such as innovation, data-driven decision-making, collaboration, openness, agility, and customer centricity, which are now considered key to the success of organizational digital transformation.

In the public sector context, the literature emphasizes that digital culture should be viewed as an institutional enabler that reduces resistance to change and shapes work practices that support automation and online services (e-government), thus forming the foundation for service transformation such as e-Samsat.

Digital competence (digital skills) has also been redefined from mere technical capabilities to a multidimensional construct encompassing data literacy, online communication and collaboration, digital content creation, cybersecurity, as well as problem-solving and continuous learning capabilities. Empirical reviews and international frameworks (e.g., DigComp and the digital competence professional study) highlight that current competency measurements must incorporate cognitive and socio-emotional dimensions that enable public actors to utilize data and digital platforms effectively and ethically.

Recent studies also show that digital competencies function as individual capabilities that increase an organization's capacity to “absorb” new technologies (absorptive capacity), thus driving the transformation process if supported by ongoing organizational learning and training.

To explain the interrelationships between constructs (digital culture, digital competency, digital transformation, and employee performance), contemporary literature often draws on the dynamic capabilities perspective and digital transformation theory, which positions technology as a source of strategic capabilities – rather than simply an operational tool. This perspective emphasizes three key routines (sensing, seizing, reconfiguring) that enable organizations to respond to technological change and combine internal resources to generate new value; within this framework, digital culture forms the cultural context for sensing/seizing, while digital competency provides individual capabilities for reconfiguring work processes. Recent multidisciplinary studies also demonstrate that digital transformation in the public sector is functionally distinct from the private sector because it involves regulation, accountability, and public engagement – therefore, transformation in the public sector depends more on organizational readiness and human resource capabilities than simply on technology investments.

The empirical findings from the uploaded case study of the Regional Revenue Agency of South Kalimantan Province show a pattern consistent with the theoretical framework: digital organizational culture and digital competency significantly drive digital transformation, but they do not always have a direct influence on employee performance without going through the transformation process itself – that is, digital transformation acts as a full mediator that facilitates the implementation of digital practices into individual performance outcomes (full mediation). The quantitative results of this thesis (N=59) report that digital culture ( $p = 0.019$ ) and digital competency ( $p = 0.008$ ) have a significant positive effect on digital transformation; while the direct effect of culture and competency on performance is insignificant, digital transformation has a strong influence on performance ( $p = 0.000$ ). These findings support the argument that without a real reconfiguration of processes, infrastructure, and policies (i.e., digital transformation), cultural values and individual capabilities are unlikely to lead to improved organizational performance.

Based on the integration of theory and current empirical evidence, several conceptual implications and research gaps guide this study: first, the measurement of digital organizational culture needs to be operationalized multidimensionally and tested in the context of public bureaucracy because certain dimensions (e.g., openness, innovation incentives, digital leadership) may be more determinant of transformation success; second, strengthening digital competencies should be designed not only as technical training but also as learning programs that develop data literacy, digital ethics, and collaborative capabilities; third, further studies need to explore moderating/contextual factors (e.g., IT infrastructure, leadership, and regulations) that enable culture and competencies to convert into performance through transformation – an agenda that aligns with the findings of recent reviews and empirical research. This study, by placing digital transformation as an intervening variable in the context of Bapenda South Kalimantan, seeks to close these empirical gaps and offer contextual evidence relevant to public service digitalization policies.

## METHODOLOGY

This study uses a quantitative approach with an associative research type, which aims to analyze the causal relationship between the variables of digital organizational culture, digital competence, digital transformation, and employee performance at the Regional Revenue Agency (Bapenda) of South Kalimantan Province. This approach was chosen because it allows for empirical testing of direct and indirect influences between variables. The study population includes all 59 employees of Bapenda of South Kalimantan Province, who were also used as research samples through a stratified proportional random sampling technique to be representative of various work sections and positions. Data collection was carried out through a structured questionnaire compiled based on theoretical indicators of each variable, such as digital organizational culture measured through seven dimensions (innovation, collaboration, data-driven decision-making, open culture, digital mindset, agility, and customer centricity) according to Buvat et al. (2017); digital competence based on five indicators of Ferrari & Punie (2013); digital transformation measured using the dimensions of resources, information systems, and organizational structure according to Mangkunegara (2017); and employee performance is measured through productivity, efficiency, and work quality indicators based on the theories of Mangkunegara (2016) and Mathis & Jackson (2019). Instrument validity is tested through construct validity and reliability tests, while reliability measurements are carried out using Composite Reliability and Average Variance Extracted (AVE).

The data obtained were analyzed using Structural Equation Modeling (SEM) based on Partial Least Squares (PLS) with the help of SmartPLS 3.0 software. The analysis stages included evaluating the outer model to assess the validity and reliability of the indicators, as well as evaluating the inner model to test the structural relationships between latent variables and the significance of the influence paths. Hypothesis testing was conducted using bootstrapping techniques to obtain t-statistics and p-values as a basis for decision-making regarding the research hypotheses. This research model also examines the mediating role of digital transformation in the relationship between digital organizational culture and digital competence on employee performance. In addition to statistical analysis, interpretation of the results was also conducted based on human resource management theory and digital transformation theory to strengthen the empirical findings. The entire research process followed scientific ethics by maintaining respondent confidentiality, using data objectively, and ensuring the replication of results through methodological transparency.

## RESULTS AND DISCUSSION

The results of data analysis using the Partial Least Square–Structural Equation Modeling (PLS-SEM) approach show that digital organizational culture has a positive and significant influence on digital transformation at the Regional Revenue Agency (Bapenda) of South Kalimantan Province with a p-value of 0.019. This indicates that the stronger the digital values, norms, and practices applied in the work environment, the greater the organization's ability to transform towards a technology-based system. These results are in line with the theory proposed by Buvat et al. (2017) which states that a digital organizational culture that is innovative, collaborative, and open to technological change is a key determinant of the success of digital transformation in both the public and private sectors. In the context of Bapenda, dimensions such as data-driven decision-making, a digital-first mindset, and a collaborative culture have been shown to accelerate adaptation to the e-Samsat system and various other digital applications implemented in regional tax management. This confirms that digital organizational culture is not just a value aspect, but also a strategic foundation that facilitates changes in work processes towards full digitalization.

Furthermore, the research results also show that employee digital competence has a positive and significant effect on digital transformation with a p value of 0.008. This means that the higher the employee's ability to access, use, and manage digital technology, the more effective the implementation of digital transformation within the agency environment. This result is consistent with the findings of Ferrari and Punie (2013) and is reinforced by van Laar et al. (2020) who stated that digital competence, especially in the dimensions of information literacy, digital communication, and problem solving, has a direct contribution to the organization's success in integrating technology into work systems. In the context of public organizations such as Bapenda, employees who master the online tax application system and are able to educate the public digitally have proven to be catalysts for the transformation of a more efficient and transparent tax service system. This result is also in line with the findings of Setiawan et al. (2023) that digital competence strengthens the apparatus' ability to adapt to changes in the e-government-based administrative system.

Meanwhile, the direct relationship between digital organizational culture and digital competency on employee performance was found to be insignificant, with p values = 0.513 and p = 0.726, respectively. This indicates that strengthening digital culture and capabilities does not automatically improve individual performance without an effective digital transformation process as a link. This condition shows that culture and competency are enablers – supporting factors that only have a significant impact on performance when integrated through structured digital work systems and processes. This finding supports the Dynamic Capabilities Theory model (Teece, 2018), which explains that organizational resources such as new values and capabilities will produce performance advantages if converted through organizational mechanisms that are adaptive to environmental changes, in this case digital transformation.

Furthermore, the test results show that digital transformation has a highly significant impact on employee performance with a p-value of 0.000. This confirms that the adoption of digital technology in work processes, information

systems, and public services significantly contributes to increased productivity, efficiency, and service quality at Bapenda. Digital transformation drives automation in tax administration processes, accelerates e-Samsat services, and increases transparency in taxpayer data management. These results align with the theory of Westerman, Bonnet, and McAfee (2014), which states that digital transformation not only updates technology but also fundamentally changes business models and organizational work patterns. In the public sector context, research by Mergel, Edelman, and Haug (2019) and Sirait (2021) found that digital transformation increases the effectiveness of public services, strengthens accountability, and creates new public value through data-driven services.

Mediation analysis shows that digital transformation significantly mediates the relationship between digital organizational culture and digital competency on employee performance, with a p value of 0.014 for digital culture and  $p = 0.025$  for digital competency. This means that culture and competency can only have an impact on improving employee performance if both are converted through the implementation of digital transformation. In other words, the digital transformation process acts as a bridge connecting organizational values and individual skills with measurable performance outcomes. This finding is in line with Vial's (2019) view that digital transformation creates systemic change in organizations by integrating technology, people, and business processes to produce more adaptive performance. Theoretically, these results strengthen the position of digital transformation as a strategic intervening variable in the model of the relationship between cultural factors and competencies on performance in public sector organizations.

Overall, the results of this study show that in the context of local government, employee performance is not only determined by individual factors, but also by the readiness of the organizational system and culture to implement comprehensive digitalization. A strong digital organizational culture encourages innovative and collaborative behavior, digital competence ensures employee readiness in operating technology, and digital transformation becomes an implementation tool that translates this potential into tangible work results. The integration of these three variables has been proven to support increased effectiveness, efficiency, and accountability of employee performance at the South Kalimantan Provincial Revenue Agency (Bapenda), while strengthening the agency's position in supporting digital-based governance transformation in Indonesia.

The research also shows that digital transformation has a significant impact on employee performance. This indicates that digital transformation is a strategic variable capable of transforming bureaucratic work processes to be more efficient, faster, and accountable. The digitalization of the Bapenda system, particularly through the implementation of e-Samsat, has been shown to increase employee productivity and effectiveness, while minimizing administrative errors. This finding reinforces the argument of Westerman, Bonnet, & McAfee (2014) that digital transformation not only replaces legacy technology but also reforms work models and organizational culture. In the context of public administration, these results align with the findings of Mergel, Edelman, & Haug (2019) who asserted that digital transformation in the government sector

can accelerate public services, strengthen transparency, and increase public trust in government institutions. Empirically, digital transformation at Bapenda has proven to be key to improving employee performance by reducing manual administrative burdens, accelerating service times, and improving the quality of interactions with taxpayers.

## **CONCLUSION AND RECOMMENDATION**

Based on the research results and discussion, it can be concluded that digital transformation plays a strategic role as an intervening variable between digital organizational culture and digital competency on employee performance within the Regional Revenue Agency of South Kalimantan Province. A strong digital organizational culture – characterized by innovative, collaborative, and open-to-technology values – has been shown to foster a work environment that is adaptive to digital change. Meanwhile, employee digital competency, which includes data literacy, online communication, and problem-solving skills, is a key asset in strengthening the digital transformation process. However, these two factors do not directly impact performance without effective digital transformation. Digital transformation has proven to be a catalyst that translates the potential of culture and competency into tangible performance improvements, demonstrated by increased service efficiency, speed of tax administration processes, and improvements in the quality of public services. These findings confirm that improving employee performance in the digital era depends not only on individuals but also on the organization's overall digital systems, values, and infrastructure.

Based on these results, it is recommended that the South Kalimantan Regional Revenue Agency (Bapenda) and other government agencies strengthen their organization's digitalization strategy holistically. First, a digital work culture emphasizing cross-sector collaboration, innovation, and data-driven decision-making is needed to actively engage every employee in the technological change process. Second, continuous digital competency improvement through training, certification, and adaptive learning oriented toward solving real-world problems in the workplace is necessary. Third, digital transformation needs to be directed not only at the technological aspect but also at the restructuring of work processes and managerial policies that support automation and integration of public service systems. The simultaneous implementation of these three aspects will strengthen organizational capabilities in facing the demands of modern bureaucracy, improve employee performance, and accelerate the realization of efficient, transparent, and digitally-based public service-oriented governance.

## **FUTHER STUDY**

This research still has delays, so it is necessary to conduct further research related to the topic *The Influence of Digital Organizational Culture and Digital Competence on Employee Performance with Digital Transformation as an Intervening Variable in the Regional Revenue Agency of South Kalimantan Province* in order to improve this research and add insight for readers.

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