

The Role Of Digital Culture In Mediating The Influence of Workload and Management Information Systems on Employee Performance

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Abstract

This study aims to determine the effect of workload on the performance of the work, the influence of management information systems on employee performance, the effect of workload on digital culture, the influence of management information systems on digital culture, the influence of management information systems on employee performance through digital culture, the influence of management information systems on employee performance through digital culture, the influence of digital culture on employee performance. The conclusion of this study is the workload affects employee performance. This means that both the workload felt by employees will affect employee performance behavior. Management information system affects employee performance. This means that both the management information system felt by employees will affect employee performance behavior. Workload affects employee digital culture. This means that both the workload felt by employees will affect the employee's digital culture. The management information system does not affect employee digital culture. This means that the management information system that employees feel by will not affect the employee's digital culture. Digital culture strengthens the effect of workload on employee performance. This means that the existence of digital culture has an impact on increasing employee performance behavior caused by workload. Digital culture does not strengthen the effect of management information systems on employee performance. This means that the existence of digital culture does not have an impact on increasing employee performance behavior caused by management information systems. Digital culture affects employee performance. This means that both digital culture that employees feel by will affect employee performance behavior.

Keywords: *Digital Culture; Workload; Management Information System; Employee Performance;*

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INTRODUCTION

The advancement of communication technology and virtual connections has opened the world to new ways of acquiring, developing, and managing talent and jobs, including changing the way jobs are distributed. In addition, it has also changed the perception of work, the people in it and the overall work culture. Digital technology has dramatically impacted the culture around the workplace and

in working, the use of digital technology facilitates work effectiveness and expands the work targets to be achieved (Buchanan et al., 2016).

Digitalization is a crucial process, and must be carried out by every type of business if it wants to continue to grow. In simple terms, digitalization is the process of change that occurs in analog technology to digital technology. The process that occurs then is greatly influenced by technological developments, until now the industry has become more modern and relies on this technology to continue to support its operations. Currently, the Ministry of Communication and Information has built 6,663 Base Transceiver Stations (BTS) devices used by cellular operators to connect user devices to telecommunications networks that are already operating and there are already 18,697 internet access points for public services. Meanwhile, internet access consists of 8,836 school points, 5,182 government offices, 2,606 health services, 743 community activity centers, 674 places of worship, 322 defense and security services, 139 tourist locations, 120 main services, and 75 public transportation (Public Relations Bureau of the Ministry of Communication and Information 2025).

The development of information technology in recent years has continued to bring significant changes to the world of work, especially in managing company operations. One important element is Digital Culture. Employees who use digital technology in companies can help with current work, because humans cannot be separated from all electronic devices (Shinta, 2025). Along with the increasingly complex demands of the digital world of work, this also affects the way of communicating and teamwork in the workplace, but also plays a role in influencing the effectiveness of employee performance. Whether we realize it or not, excessive workloads that do not meet the standards and capacities of individuals can result in stress, fatigue and decreased motivation that affect employee performance (Alfitriah Syahmi et al, 2023). In the study of Puliwarna T et, al (2023) showed that workload has a positive effect on employee performance, where the higher the excessive workload, the more individuals can cause decreased motivation towards employee performance, but on the other hand in the study of Manalu et, al (2020) found that workload has no significant effect.

Another factor that influences employee performance is the management information system, which has a very crucial role in supporting both overall performance and individual performance of each employee (Fitria Ali et al., 2023). A well-designed system can significantly improve performance, but this will not be achieved without the support of adequate human resources and a high commitment to implementing the system (Alfitra Syahmi et al., 2023). In other words, the success of a management information system depends not only on the technology used, but also on the quality and dedication of employees in running the system optimally. A management information system is an information system that functions to manage information for organizational management (Nugroho 2008). The management information system provides good information for transaction processing, control management and as a decision-making support system. The management information system used by Siloam Hospital Bali is the Hospital Information System (HIS), which is an information technology foundation

specifically designed to improve the efficiency and effectiveness of management in the hospital environment (Maulana, 2025).

So that with this HIS, it is hoped that it can improve employee performance more effectively. This is in line with research related to management information systems conducted by, Y. Q., & Ubaidillah, H. (2023), Meirinhos, et al. (2023), Noval Nur Alif, Fetty Poerwita Sary, (2022) and Widyaputri, P., & Sary, F. P. (2022) with the results of management information systems having a significant positive effect on performance, but on the other hand, research conducted by Andia, Cinderella Puteri, Wan Muhamad Kudric, (2023), stated that the management system had no significant effect on employee performance levels. Based on the inconsistencies found in previous studies, researchers propose a solution variable to bridge the existing gap, namely Digital Culture as a mediating variable. Digital Culture is considered a key factor that can connect various elements that have not been clearly identified in previous studies, as well as provide a deeper understanding of the influence of digital culture on the performance and effectiveness of systems in organizations. The use of technology in business is accepted and promoted with the aim of increasing productivity and quality (Putri et al., 2021).

Shared values, standards, and practices that shape a company's digital culture shape how employees interact with and use the company's digital tools (Putri et al., 2021). This shows that each member of the group has a strong belief in using digital technology and is committed to using it. Digital culture can help employees do their jobs more efficiently, so it can be said that digital culture can help employee performance. In line with this, digital culture has an effect on employee performance (Onny Pakpahan et al., 2025). Based on the results of research conducted by several researchers above, this study will re-examine employee performance on workload and management information systems mediated by digital culture.

METHOD

Quantitative methods are used in this study. Quantitative research is objective and focuses on collecting and analyzing facts in the form of numbers. The research variables can be identified and the relationship between them can be measured (Abdullah et al., 2022). As stated by Sugiono (2018), quantitative research methods, which are based on positivism, are used to examine a particular population or sample. Sampling is usually done randomly, research tools are used to collect data, and previously made hypotheses are tested through quantitative or statistical data analysis. This section consists of the techniques/procedures used in this study. The population of all medical and non-medical employees at Siloam Hospital Bali is 348, but only 128 employees use the Management Information System. Among them are the financial management, human capital, administration, sales and medical divisions. The sampling technique in this study uses the

Purposive Sampling Technique, where the selection of purposive sampling is carried out because the population is considered to have certain criteria to be studied.

In this study, researchers will distribute online questionnaires via Google Form to medical and non-medical employees of Siloam Hospital in Bali. The process

of distributing this questionnaire was carried out directly to all respondents who were medical and non-medical employees of Siloam Hospital in Bali. Thus, respondents answered and filled in all personal data questions in the questionnaire. In this study, the data analysis technique used was the Structural Equation Modeling (SEM) approach based on Partial Least Square (PLS).

RESULT AND DISCUSSION

The majority of respondents with female gender are more, namely 57.7%, than male respondents at 42.3%, where the age of respondents aged 21-30 years is 30.4%, those aged 31-40 years are 32.5%, those aged 41-50 years are 14.6% and those over 50 years are 22.5%, this shows that respondents are still in the productive age range. Judging from the last level of education, respondents with a high school education level of 42.6%, a Diploma education level of 13.3%, a Bachelor's education level of 34.3%, and a Postgraduate education level of 3.5%.

From the R-Square results above, it shows that the R-Square value is 0.689. This value indicates that the variables Workload, Management Information Systems and Digital Culture have an effect on the Employee Performance variable of 68.9%. And the rest is influenced by other variables outside the variables in this study.

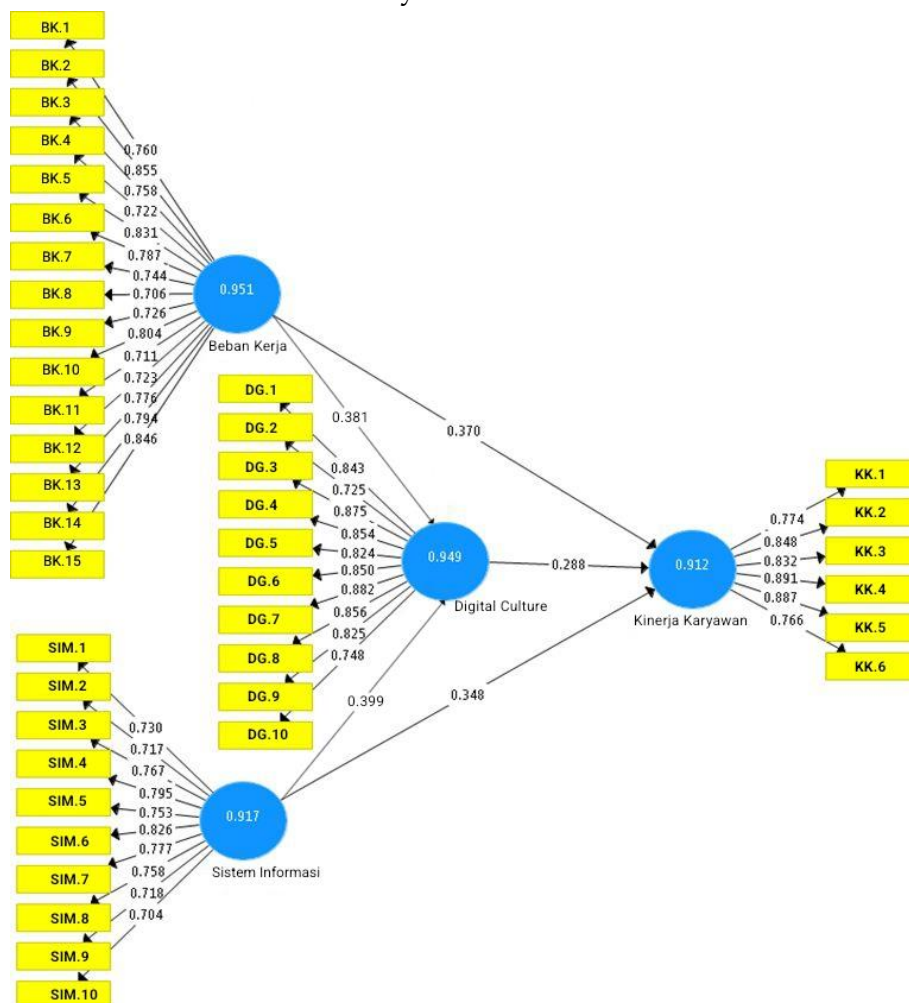


Figure 1. Algoritma PLS-SEM.

The Impact of Workload on Employee Performance

The findings reveal that workload has a significant positive impact on employee performance, as indicated by a t-statistic of 3.117 (greater than 1.65) and a p-value of 0.003 (less than 0.05). This confirms that well-managed workloads enhance employee productivity and efficiency. When employees are provided with structured and achievable workloads, it can lead to better focus, time management, and overall job satisfaction, which contributes to improved performance. This result is consistent with the findings of Arifuddin & Napirah (2024), who concluded that appropriate workload levels positively impact the performance of nurses at RSUD Undata Palu. Likewise, Ayuazzahra & Aziz (2021) emphasized that workload is a crucial factor that significantly affects performance, especially when aligned with employees' capacity and organizational support.

The Impact of Management Information Systems (MIS) on Employee Performance

The study also found a significant positive effect of Management Information Systems on employee performance, supported by a t-statistic of 4.557 and a p-value of 0.000. This indicates that an efficient MIS improves workflow, facilitates quicker decision-making, and enhances operational effectiveness. A reliable information system enables better communication, coordination, and control within the organization. This result supports the study by Fahry Akbar et al. (2015), which showed that MIS significantly improves employee performance by enhancing access to information and reducing administrative burdens. Similarly, Fitria Ali et al. (2023) concluded that MIS plays a pivotal role in supporting employee performance in banking environments, particularly in improving task accuracy and monitoring efficiency.

The Impact of Workload on Digital Culture

Workload also has a significant influence on digital culture, with a t-statistic of 1.921 and a p-value of 0.007. This suggests that increasing workload, when paired with technological support, can drive digital transformation within the organization. Employees facing more complex tasks tend to adopt digital tools to manage time and tasks more effectively, thereby fostering a digital-oriented work culture. This aligns with the findings of Al-Dulaimi & Turki (2024), who emphasized that workload pressure can act as a trigger for embracing digital work culture, as employees seek more efficient methods to handle growing demands through digital means.

The Impact of Management Information Systems on Digital Culture

In contrast, the impact of MIS on digital culture was found to be insignificant, with a t-statistic of 0.369 and a p-value of 0.217. Although MIS enhances performance directly, it does not necessarily foster a digital work culture. This may be due to MIS being used primarily for functional or administrative purposes, without significantly influencing employees' mindset or technological engagement. This is in line with Syahmi (2023), who observed that hospital

information systems improved workflow but had limited effect on transforming organizational culture into a digital one.

The Impact of Digital Culture on Employee Performance

The study confirms a positive and significant relationship between digital culture and employee performance, indicated by a t-statistic of 3.978 and a p-value of 0.000. A strong digital culture fosters adaptability, encourages innovation, and supports collaboration through technology, which in turn leads to improved performance outcomes. This supports the findings of Alfayza Diva et al. (2024), who highlighted the role of digital culture in enhancing employee efficiency and responsiveness in the workplace. Similarly, Alfonso-Ruiz et al. (2020) emphasized that digital organizational culture plays a strategic role in driving performance by facilitating knowledge sharing and digital readiness.

The Mediating Role of Digital Culture Between Workload and Employee Performance

Digital culture was found to mediate the relationship between workload and employee performance, with a t-statistic of 4.368 and a p-value of 0.005. This means that while workload directly influences performance, its impact is enhanced when employees operate within a digital culture that supports flexibility, autonomy, and the use of digital tools to manage tasks. This supports the conclusions of Ferdian & Rahmawati (2019), who stated that digital culture acts as a bridge between workload and productivity, helping employees adapt to workload pressures by utilizing digital platforms and systems.

The Mediating Role of Digital Culture Between MIS and Employee Performance

However, digital culture did not mediate the relationship between MIS and employee performance, as indicated by a t-statistic of 0.818 and a p-value of 0.411. This suggests that while MIS enhances performance on its own, it does not significantly influence performance through the pathway of digital culture. This could be due to the technical nature of MIS implementation, which may not sufficiently influence cultural transformation unless accompanied by leadership commitment and strategic alignment. This aligns with the observations of Riswanto & Rachmadi (2023), who emphasized that the successful implementation of digital systems must be supported by cultural and behavioral change within the organization in order to be fully effective.

This study provides evidence that both workload and MIS have a direct and positive effect on employee performance. However, digital culture serves as a significant mediating variable only in the relationship between workload and performance, not between MIS and performance. This underscores the importance of cultivating a strong digital culture as a strategic asset to enhance performance, especially when employees are handling high workloads. Organizations should therefore not only invest in digital tools and systems but also develop a supportive digital work culture through training, leadership, and inclusive digital transformation initiatives. These findings offer practical insights for managers,

especially in the post-pandemic era, where digital resilience has become central to organizational success.

CONCLUSION

The conclusion of this study is that Workload affects Employee Performance. This means that both Workload felt by employees will affect Employee Performance behavior. Management Information System affects Employee Performance. This means that both Management Information System felt by employees will affect Employee Performance behavior. Workload affects employee Digital Culture. This means that both Workload felt by employees will affect employee Digital Culture behavior. Management Information System does not affect employee Digital Culture. This means that both Management Information System felt by employees will not affect employee Digital Culture behavior. Digital Culture strengthens the influence of Workload on Employee Performance. This means that the existence of Digital Culture has an impact on increasing Employee Performance behavior caused by Workload. Digital Culture does not strengthen the influence of Management Information System on Employee Performance. This means that the existence of Digital Culture does not have an impact on increasing Employee Performance behavior caused by Management Information System. Digital Culture affects Employee Performance. This means that both Digital Culture felt by employees will affect Employee Performance behavior.

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