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THE INFLUENCE OF DIGITAL COMPETENCE ON EMPLOYEE AGILITY THROUGH TASK AUTONOMY AMONG ADMINISTRATIVE STAFF

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ABSTRACT

Phenomenon/Issue: *The Fourth Industrial Revolution requires employees to adapt rapidly to technological changes, shifting from manual to digital work environments*
Purpose: *To analyze the influence of digital competence on employee agility through task autonomy, based on the Theory of Work Adjustment (TWA)*
Novelty: *The integration of digital competence and task autonomy within the framework of TWA to explain employee agility—a relatively unexplored relationship in the context of administrative staff in higher education institutions*
Research Methods: *Explanatory quantitative approach using questionnaires distributed to 146 administrative staff at the State University of Surabaya. Data were analyzed using PLS-SEM (Partial Least Squares-Structural Equation Modelling).*
Results: *The study found that digital competence significantly enhances employee agility. It also positively influences task autonomy, which in turn has a significant impact on employee agility. Moreover, task autonomy effectively mediates the relationship between digital competence and employee agility, highlighting its crucial role in supporting employees' adaptability in a digital work environment*
Research Contributions: *Provides empirical support for the importance of enhancing digital competence and task autonomy to improve employee agility in response to digital transformation, particularly within the context of public university administration in the era of the Fourth Industrial Revolution*

INTRODUCTION

The era of the Fourth Industrial Revolution, triggered by rapid technological advancements, has changed many aspects of life, from ways of living and communicating to current work methods (Schwab, 2017). The 4.0 revolution represents a major shift in the industrial sector, marked by the advent of the Internet of Things and further advancements in data science, artificial intelligence, robotics, cloud computing, 3D printing, and nanotechnology (Ghufron, 2018). Ghufron (2018) argues that the Industrial Revolution 4.0 is synonymous with another term, the digital revolution, where there has been a significant notable rise in the utilization of computers and the automation of records across various sectors, including education.

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The era of the Fourth Industrial Revolution presents a challenge for higher education institutions, as they are required to remain relevant in the current era (Aini & Istiana, 2019). One way to stay relevant is by integrating technology into every aspect and process within the university environment. Technology is not only used in the learning process but also in administrative services. The implementation of technology provides many conveniences in both academic and non-academic activities, ultimately enhancing the quality of education (Surani, 2019).

State University of Surabaya, as one of the public universities in Indonesia, has integrated technology into its administrative services. Based on interviews with administrative staff, the State University of Surabaya has implemented technology as a Single Sign-On (SSO) website. SSO allows internet users at the university to access information systems with a single user account (PPTI UNESA, 2017). This system includes various applications such as SAKU (UNESA Performance Appreciation Information System), I-SDM (UNESA Human Resources Information System), SIMAS (Archive and Activity Report Management Information System), SIDINA (UNESA Digital Signature Information System), and e-office, which is an electronic correspondence information system. This technological implementation reflects the essence of the Industrial Revolution 4.0 by transitioning manual tasks to digital.

According to the administrative staff at the State University of Surabaya, this digitalization in administration brings ease, as tasks can be completed quickly with the help of technology. However, the ease of implementation of technology in administrative work comes with competency demands on the staff (Ramadhan & Muhyadi, 2021). Based on interviews, staff feel a new demand to adapt to the shift from manual to digital work quickly. In recent years, administrative staff at the State University of Surabaya must keep up with and adapt to the rapid and extensive technology implementations in recent years. This new demand requires administrative staff to have the capability to swiftly adjust to changes. The ability of employees to handle and respond to changes by adapting to new conditions is referred to as employee agility (Alavi et al., 2014).

Each individual has a different ability to adjust to changes in the work environment, corresponding to different adaptation processes (Fitri et al., 2023). Based on interviews with administrative staff, some staff have good employee agility due to their familiarity with technological changes in the work environment. In contrast, others often struggle to adapt and adjust to technological changes. Difficulty in adapting to technological changes causes staff to take longer to complete administrative tasks, which can hinder the achievement of administrative performance targets and objectives at the State University of Surabaya. The varying levels of employee agility among staff warrant further investigation into the factors influencing it among administrative staff at the State University of Surabaya.

The ability to respond and adjust to changes in the work environment is explained by the Theory of Work Adjustment proposed by Dawis & Lofquist in 1984. This theory is based on the assumption that individuals strive to align and maintain correspondence with their environment (Dawis & Lofquist, 1984). Eggerth (2008) argues that the theory explains how individuals fulfill job requirements in the work environment, and when changes occur, they will try to adjust and respond to these changes. Therefore, this theory is a conceptual basis for understanding how administrative staff at the State University of Surabaya exhibit good employee agility amid digitalization changes.

Based on interviews with administrative staff, strategies or methods to adapt to rapid and massive technological changes include improving competencies or skills related to technology use. Employees actively using digital technology in their work generally possess digital competence that can be applied in the work environment (Colbert et al., 2016). Digital competence is defined as the knowledge and ability of employees to use digital devices, including software, knowledge management, Enterprise Social Media (ESM), operating systems, and an understanding of digital applications in business processes (Pitafi et al., 2018). Interviews with staff reveal their awareness of the importance of having digital competence amid ongoing job digitalization. Using technology at work is crucial for enhancing employee agility (Bala et al., 2019). Employees with good digital competence are valuable for organizations as they can easily embrace innovation and solve problems efficiently (Sadik Tatli et al., 2023). Additionally, digital competence equips employees with various options for utilizing technology, facilitating their adaptation in the current era of change (Ravichandran, 2018). Previous research by Breu et al., (2001); Lim et al., (2021); Nadzim & Halim, (2022); Saputra et al., (2022); and Tien et al. (2020) has shown that digital competence can influence the level of employee agility.

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Apart from the phenomena of employee agility and digital competence among administrative staff at the State University of Surabaya, another interesting phenomenon to discuss is the tendency of staff to work independently. Task autonomy refers to the degree of independence and freedom that employees have in carrying out their tasks (Belias et al., 2015). The level of task autonomy is related to employee agility because employees with independence and freedom in completing their tasks can determine when, how, and which methods to use, allowing them to be more flexible in adjusting to unexpected changes (Sherehiy & Karwowski, 2014). This statement is supported by previous research from Lai et al., (2021); Munteanu et al., (2020); and Sherehiy & Karwowski, (2014), which state that task autonomy affects employee agility.

In an increasingly digitized work environment, employees' digital competence influences task autonomy (Lai et al., 2021; Mampuono et al., 2022; Ochoa Pacheco & Coello-Montecel, 2023). Adequate digital competence allows employees to work independently and autonomously, enabling them to manage their time freely (Ochoa Pacheco & Coello-Montecel, 2023; Saputra et al., 2021). In other words, the ability to use technology among administrative staff at the State University of Surabaya allows them to manage and perform tasks independently. However, this view contrasts with research by Dietz et al., (2022), which found that technology use does not significantly relate to task autonomy, indicating that the ability to use technology does not affect task autonomy.

Given the differing opinions from previous research on task autonomy, it is interesting to consider task autonomy as a mediating variable in this study. Task autonomy as a mediating variable between digital competence and employee agility has been previously investigated by Lai et al., (2021), who concluded that task autonomy mediates the effect of digital competence on employee agility. Lai et al. (2021) researched service, finance, and manufacturing employees. This study presents novelty by focusing on different respondent characteristics, such as employees working in education, specifically within higher education institutions. This difference in respondent characteristics is considered novel because the work environment in higher education has different dynamics and demands compared to the service, finance, and manufacturing industries. Therefore, research on how task autonomy mediates the connection between digital competence and employee agility among higher education staff may reveal new insights, enriching the current literature on these topics

LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

Theory of Work Adjustment

Lofquist and Dawis introduced the Theory of Work Adjustment in 1969 to explain how individuals interact with their work environments (Musah & Ebikabowei, 2022). This theory is founded on the idea that individuals and the work environment engage in a reciprocal relationship, meaning individuals strive to meet the demands of their work environment, and the work environment also strives to meet the needs of the individuals (Dawis & Lofquist, 1984). This concept creates three basic assumptions in this theory: first, as living beings, individuals have requirements that the work environment must meet; second, individuals can meet these requirements; third, most of the behaviors individuals exhibit in interacting with their work environment aim to fulfill these requirements (Brown & Lent, 2005). Based on these assumptions, individuals continuously strive to establish and maintain a connection with work environment.

The ongoing dynamic process individuals engage in to establish and maintain congruence with work environment in the Theory of Work Adjustment is called work adjustment (Brown & Lent, 2005). This theory serves as a foundation for developing the concept of employee agility, where the dimensions of "activeness," "reactiveness," and "flexibility" in theory initially inspired the concept of employee agility, which was expanded by Sherehiy in 2008 (Salmen & Festing, 2022).

Digital Competence

Undeniably, the Industrial Revolution 4.0 has driven digitalization (Schwab, 2017). Almost all activities today have transformed into digital formats (Lian, 2019). This digitalization demands that human resources master advanced technology and data literacy (Ramadhan & Muhyadi, 2021). Currently, most industries require human resources to use digital technology (Rohida, 2018). Therefore, individuals must equip themselves with competencies in using digital technology. The ability and skill to use technology are commonly referred to as digital competence, but there are several other terms for this

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ability, including ICT skills, information technology skills, 21st-century skills, information literacy, digital literacy, and digital skills (Marguna, 2020). Based on Pitafi et al., (2018), digital competence is the knowledge and ability of employees to use digital devices, including software, knowledge management, Enterprise Social-Media (ESM), operating systems, and an understanding of digital applications in business processes. Spante et al., (2018) define digital competence as the capacity to adaptively navigate and confront new technological situations with the capability to analyze, filter, and critically evaluate data and information, the ability to utilize technological potential to solve problems, build shared knowledge and collaboration, and increase consciousness of individual accountability and reverence for the rights and obligations of others. Based on the views of these experts, digital competence can be summarized as an individual's ability to utilize technology effectively.

Task Autonomy

Organizations must provide employees with freedom to work in dynamic changes in the work environment. Parker & Grote (2022) define task autonomy as an essential aspect of job characteristics that positively impact work outcomes. The autonomy given allows employees to be more flexible in their tasks, leading to greater innovation in their work (Novianti & Fuadiputra, 2021). Employees with high task autonomy are also more persistent, meaning they can endure challenges longer and manage workloads more creatively (Belias et al., 2015). Hackman and Oldham (Hope et al., 2022) define task autonomy as the extent to which a job allows an individual the freedom, independence, and discretion to schedule their tasks, procedures, methods, sequences, and quality control. Al Azzam (2018) defines task autonomy as the level of independence granted to employees in making decisions about their work and identifying issues concerning their tasks, such as how and when they should perform their duties. Another perspective by Ele et al. (2023) describes task autonomy as the extent to which a job offers employees with the freedom and flexibility to strategize and decide on their work approach. From these various definitions, task autonomy can be summarized as the level of independence employees have in organizing and executing their tasks independently.

Employee Agility

The advancement of technology due to the Fourth Industrial Revolution has created an increasingly challenging work environment that demands employees to possess agility for achieving job success (Wahjunianto, 2022). Companies need employees with high agility because, with agility, they can quickly adapt, innovate, and remain flexible in the face of upcoming changes (Sadijah et al., 2023). Therefore, amidst the dynamic changes in the world of work, it is crucial for employees to have agility. According to Chonko & Jones (2005), employee agility consists of two aspects: employees' capacity to respond and adjust to changes effectively and optimize and transform changes into benefits for the company. Alavi et al. (2014) define employee agility as the ability of employees to handle and react to changes by adapting to new conditions and situations. Another perspective by Sadijah et al. (2023), regarding employee agility is refers to the capability of employees to effectively and timely react to dynamic and constantly changing changes and utilize changes to achieve maximum benefit. Based on the views of these experts, it can be concluded that employee agility refers to the capability of employees to quickly and accurately respond and adapt to changes, thereby optimizing changes for the success of the company or organization.

Hypothesis 1 (H1): Digital competence influences employee agility.

This hypothesis suggests that the extent of digital competence possessed by employees affects their agility in adapting to and utilizing technology in the current era of rapid technological advancements across various job aspects (Ravichandran, 2018). This aligns with studies conducted by Breu et al., (2001); Lim et al., (2021); Nadzim & Halim, (2022); Saputra et al., (2022); and Tien et al., (2020), which found that digital competence indeed impacts employee agility.

Hypothesis 2 (H2): Digital competence influences task autonomy.

This hypothesis suggest that the extent of digital competence possessed by employees has a positive impact on their ability to work autonomously, allowing them to manage their work schedules more flexibly (Ochoa Pacheco & Coello-Montecel, 2023; Saputra et al., 2021). The influence of digital competence on task autonomy is supported by research conducted by Lai et al., (2021); Mampuono et

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al., (2022); and Ochoa Pacheco & Coello-Montecel, (2023), which concluded that digital competence indeed affects task autonomy positively.

Hypothesis 3 (H3): Task autonomy influences employee agility
This hypothesis suggests that employees who have greater autonomy in their work can find innovative ways to perform their tasks, leading to higher creativity and resilience amidst changes (Belias et al., 2015; Huu, 2023). This statement is consistent with studies conducted by Karim & Laksmiwati, (2022); Lai et al., (2021); Munteanu et al., (2020); Raut et al., (2022); Sherehiy & Karwowski, (2014); and Sun et al., (2023) which concluded that task autonomy positively affects employee agility.

Hypothesis 4 (H4): Task autonomy mediates the relationship between digital competence and employee agility.
This hypothesis proposes that task autonomy acts a mediator in the relationship between the level of digital competence possessed by employees and their agility in rspond and adapt to changes promptly and effectively (Belias et al., 2015; Ochoa Pacheco & Coello-Montecel, 2023). It acorresponds with the discoveries of Lai et al., (2021), who suggested that task autonomy acts as a mediator between digital competence and employee agility

METHOD

The type of research is quantitative to determine how digital competence affects employee agility through task autonomy. The population in this study consists of all administrative staff at Universitas Negeri Surabaya, totaling 229 individuals distributed across several faculties. The research sample was taken using a purposive sampling technique due to specific criteria: employees who use applications or websites on the Single Sign-On (SSO) platform in their work. Based on the calculation formula of Slovin with a 5% error tolerance level, the sample size for this study is 146 individuals. Data collection used a questionnaire containing written statements distributed via Google Form. Participants' responses were assessed using a Likert scale ranging from 1 to 5 to assess the results of statement instruments for the variables of digital competence (X), task autonomy (Z), and employee agility (Y). The instrument for digital competence consists of 10 items formulated using indicators from Ferrari, (2013). Task autonomy consists of 6 items formulated using indicators from Sherehiy et al. (2007). Employee agility consists of 9 items formulated using indicators from Morgeson & Humphrey, (2006). Before the questionnaire was distributed to the sample, the validity and reliability of 25 statement items were tested on 30 respondents outside the study sample. The results showed that all 25 statement items were valid, with a reliability value of Cronbach's Alpha at 0.975.
The research data underwent analysis using PLS-SEM, which comprised two sub-models: the outer model and the inner model (Ghozali & Latan, 2015). If the convergent validity test results indicate that AVE > 0.5 and the discriminant validity in cross-loadings is > 0.7, then each latent variable is deemed valid. On the other hand, construct reliability is considered reliable if the composite reliability value is > 0.60. To estimate the relationships between variables in the study, we examined the R-Square determinant values and significance (two-tailed). R-squared values are categorized into three categories: 0.67 is strong, 0.33 is moderate, and 0.19 is weak (Ghozali & Latan, 2015). Meanwhile, the relationship between variables is considered significant if the p-value less than 0.05 (Hair et al., 2017).

RESULTS AND DISCUSSIONS

RESULTS
Analysis of the outer model using PLS-SEM produced a model that is both valid and reliable with AVE values in convergent validity in Table 1 for digital competence at 0.573, employee agility at 0.610, and task autonomy at 0.594, all of which are > 0.5. The cross-loading values in discriminant validity in Figure 1 for all statement items were > 0.7 (X1 = 0.726; X2 = 0.795; X3 = 0.754; X4 = 0,751; X5 = 0,770; X6 = 0.730; X7 = 0.729; X8 = 0.720; X9 = 0,819; X10 = 0,774; Y1 = 0.760; Y2 = 0.814; Y3 = 0.817; Y4 = 0,754; Y5 = 0,726; Y6 = 0.813; Y7 = 0.823; Y8 = 0.718; Y9 = 0,729; Z1 = 0,796; Z2 = 0.716; Z3 = 0.818; Z4 = 0.779; Z5 = 0,735; Z6 = 0,774). The composite reliability values for all three variables were > 0.6, as seen in Table 1, indicating that all three variables are reliable.

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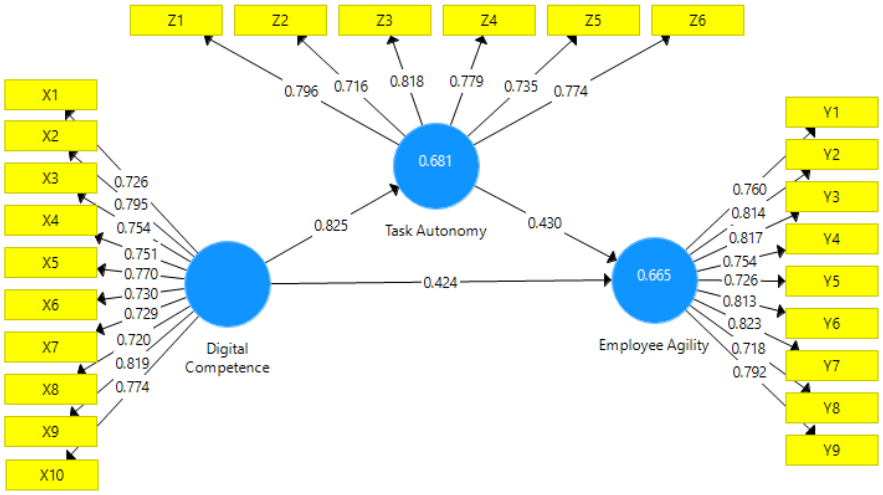
Table 1.
CONSTRUCT RELIABILITY AND VALIDITY

	Cronbach's Alpha	rho_A	Composite Reliability	Average Variance Extracted (AVE)
Digital Competence	0.917	0.919	0.931	0.573
Employee Agility	0.920	0.921	0.933	0.610
Task Autonomy	0.862	0.863	0.897	0.594

Source: data processed by researchers



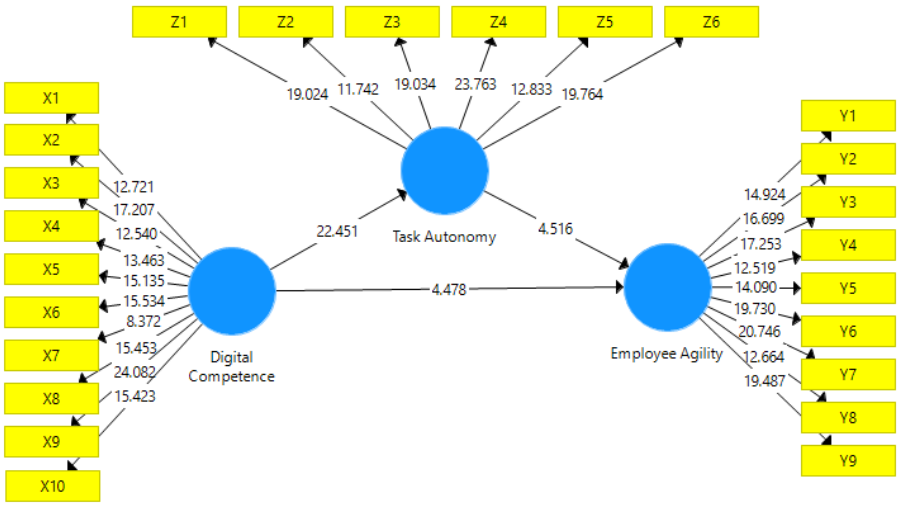
Source: data processed by researchers
Figure 1. MEASUREMENT MODEL

The inner model analysis results indicate that the R-Square value for employee agility is 0.665, which falls into the moderate category. This R-Square value indicates that 66.5% of employee agility is influenced by digital competence and task autonomy, while the remaining 33.5% is affected by other factors not tested in this study. Task autonomy has an R-squared value of 0.681, which falls into the strong category. A value of 0.681 for R-Square means that 68.1% of task autonomy is influenced by digital competence, while the remaining 31.9% is affected by other factors not examined in this study.

Table 2.
R-SQUARE AND R-SQUARE ADJUSTED

	R Square	R Square Adjusted
Employee Agility	0.665	0.661
Task Autonomy	0.681	0.679

Source: data processed by researchers



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Source: data processed by researchers

Figure 2. BOOTSTRAPPING TEST

The research hypotheses show significant positive results, as seen from the bootstrapping test results in Figure 2. According to the explanation in Table 3, the impact of digital competence on employee agility may be regarded as positively significant, evidenced by an Original Sample 0.424 and a p-value less than 0.05, specifically 0.000. This finding indicates that H1 is accepted.

The impact of digital competence on task autonomy is evident from an Original Sample 0.825 and a p-value of 0.000, which is below 0.05 in Table 3. This value signifies that digital competence positively and significantly influences task autonomy. Therefore, H2 is accepted.

The influence of task autonomy on employee agility is observed from an Original Sample 0.430 and a p-value of 0.000, less than 0.05 in Table 3. Based on these values, it is concluded that task autonomy positively and significantly affects employee agility, indicating that H3 is accepted.

Digital competence has a positive and significant impact on employee agility through task autonomy, as seen from the Original Sample 0.355 and a p-value of 0.000, which is less than 0.05 in Table 3. This finding suggests that task autonomy serves as a mediator in the connection between digital competence and employee agility, thereby confirming that H4 is accepted.

Table 3.
PATH COEFFICIENTS

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (|O/STDEV|)	P Values
Digital Competence -> Employee Agility	0.424	0.418	0.091	4.640	0.000
Digital Competence -> Task Autonomy	0.825	0.825	0.036	23.141	0.000
Task Autonomy -> Employee Agility	0.430	0.433	0.095	4.531	0.000
Digital Competence -> Task Autonomy -> Employee Agility	0.355	0.358	0.080	4.415	0.000

Source: data processed by researchers

DISCUSSIONS

H1: Digital competence influences employee agility

This study revealed that digital competence positively and significantly influences employee agility among administrative staff at Universitas Negeri Surabaya, with a coefficient of 0.424. This implies that as employees' digital competence levels increase, their agility in adapting to dynamic and evolving work environments will increase too. An increase in digital competence enhances employee agility by 42.4%. Employees proficient in utilizing technology in their work can quickly adopt and integrate new technologies and adjust work strategies to technological changes, thereby strengthening their adaptive capabilities. These findings align with prior research which concluded that digital competence influences employee agility (Breu et al., 2001; Lim et al., 2021; Nadzim & Halim, 2022; Saputra et al., 2022; and Tien et al., 2020). Furthermore, they align with the study, which similarly found that using technology at work affects employee agility (Bala et al., 2019; Cai et al., 2018; Indiarmeta & Suyono, 2022; Wei et al., 2020).

H2: Digital competence influences task autonomy

In this study, findings indicate that digital competence positively and significantly influences task autonomy, with a coefficient of 0.825. This means that the higher employees' ability to use technology, the greater their level of autonomy and freedom in their work. An increase in digital competence enhances task autonomy by 82.5%. Digital competence enables employees to master various tools and technologies needed for their tasks, allowing them to work autonomously without always relying on assistance or instructions from others. These findings are supported by previous research, which concludes that digital competence influences task autonomy (Lai et al., 2021; Mampuono et al., 2022; Ochoa Pacheco & Coello-Montecel, 2023). Additionally, they align with the study, which similarly found that the use of technology in work affects task autonomy (Bhatnagar & Grosse, 2019; Wang et

al., 2020). Overall, these studies collectively conclude that digital competence positively impacts task autonomy, which aligns with the findings of this study.

H3: Task autonomy influences employee agility

The data analysis reveals a significant positive influence of task autonomy on employee agility, with a coefficient of 0.430. This indicates that the greater the level of task autonomy among employees, the more effectively they can adapt to the dynamic changes in the work environment. An increase in task autonomy enhances employee agility by 43%. The freedom to work independently enables employees to adjust to changes quickly and encourages their initiative in completing tasks. These findings align with previous research that task autonomy positively influences employee agility (Karim & Laksmiwati, 2022; Lai et al., 2021; Munteanu et al., 2020; Raut et al., 2022; Sherehiy & Karwowski, 2014; Sun et al., 2023).

H4: Task autonomy mediates the relationship between digital competence and employee agility

This study found that digital competence significantly and positively influences employee agility through task autonomy, with a coefficient of 0.355. In other words, the higher the digital competence, the higher the level of task autonomy, thereby increasing employee agility. Increased digital competence results in a 35.5% increase in employee agility mediated by task autonomy. Autonomy in work functions as a critical bridge between technological proficiency and employees' ability to adjust to changes in the work environment. These findings are supported by research conducted by Lai et al., (2021), which concluded that task autonomy mediates the connection between digital competence and employee agility

CONCLUSION

Based on the results and analysis conducted, it is concluded that digital competence significantly and positively influences employee agility among administrative staff at Universitas Negeri Surabaya. Digital competence also positively and significantly affects task autonomy among administrative staff at Universitas Negeri Surabaya. Task autonomy, in turn, positively and significantly influences employee agility among administrative staff at Universitas Negeri Surabaya. Furthermore, task autonomy is a mediator in the connection between digital competence and employee agility. This study is limited to exploring the influence of digital competence on employee agility through task autonomy, specifically among administrative staff at Universitas Negeri Surabaya. Future research is encouraged to expand on other factors that may influence digital competence, task autonomy, and employee agility.

REFERENCES

Aini, R. N., & Istiana, P. (2019). Kompetensi Pustakawan Perguruan Tinggi Dalam Era Revolusi Industri 4.0. *Jurnal Pustakawan Indonesia*, *17*(2), 71–78.

Al Azzam, A. (2018). Job Design Dimensions and Its Impact on Knowledge Sharing Among Employees in Jordanians Hospitals in Irbid District – Jordan. *British Journal of Management*, *29*(3). https://doi.org/10.5281/zenodo.1186830

Alavi, S., Abd. Wahab, D., Muhamad, N., & Arbab Shirani, B. (2014). Organic structure and organizational learning as the main antecedents of workforce agility. *International Journal of Production Research*, *52*(21), 6273–6295. https://doi.org/10.1080/00207543.2014.919420

Bala, H., Massey, A. P., & Seol, S. (2019). Social media in the workplace: Influence on employee agility and innovative behavior. *Proceedings of the Annual Hawaii International Conference on System Sciences*, *2019-Janua*, 2367–2376. https://doi.org/10.24251/hicss.2019.286

Belias, D., Koustelios, A., Sdrolias, L., & Aspridis, G. (2015). Job Satisfaction, Role Conflict and Autonomy of Employees in the Greek Banking Organization. *Procedia - Social and Behavioral Sciences*, *175*(October), 324–333. https://doi.org/10.1016/j.sbspro.2015.01.1207

Bhatnagar, S., & Grosse, M. (2019). Future workplace organization: How digitization affects employees' job satisfaction in agile workplaces. *International Journal of Product Development*, *23*(4), 264–291. https://doi.org/10.1504/IJPD.2019.105492

Breu, K., Hemingway, C. J., Strathern, M., & Bridger, D. (2001). Workforce agility: The new employee

strategy for the knowledge economy. *Journal of Information Technology*, *17*(1), 21–31. https://doi.org/10.1080/02683960110132070

Brown, S. D., & Lent, R. W. (2005). *Career Development and Counseling: Putting Theory and Research to Work*. John Wiley & Sons, Inc.

Cai, Z., Huang, Q., Liu, H., & Wang, X. (2018). Improving the agility of employees through enterprise social media: The mediating role of psychological conditions. *International Journal of Information Management*, *38*(1), 52–63. https://doi.org/10.1016/j.ijinfomgt.2017.09.001

Chonko, L. B., & Jones, E. (2005). The need for speed: Agility selling? *Journal of Personal Selling and Sales Management*, *25*(4), 371–382. https://doi.org/10.1080/08853134.2005.10749071

Colbert, A. E., Yee, N., & George, G. (2016). THE DIGITAL WORKFORCE AND THE WORKPLACE OF THE FUTURE. *Academy of Management Journal*, *59*(3), 731–739. https://doi.org/10.1163/221059512X626108

Dawis, R. V., & Lofquist, L. H. (1984). *The Minnesota Importance Questionnaire (MIQ) Report 217 Reference s 225 Gloss ary 233 Subject Index 243*.

Dietz, C., Bauermann, P., & Zacher, H. (2022). Relationships between ICT Use for Task and Social Functions, Work Characteristics, and Employee Task Proficiency and Job Satisfaction: Does Age Matter? *Merits*, *2*(3), 224–240. https://doi.org/10.3390/merits2030016

Eggerth, D. E. (2008). From theory of work adjustment to person-environment correspondence counseling: Vocational psychology as positive psychology. *Journal of Career Assessment*, *16*(1), 60–74. https://doi.org/10.1177/1069072707305771

Ele, A. A., Eneh, S. I., Okongo, N. J., Ettah, O., Ewah, S. F., & Abdullahi, S. (2023). *Effects of Job Design Dimensions on Organizational Performance : A Study of Cross River State Internal Revenue Service, Calabar*. *4*(6), 36–51.

Ferrari, A. (2013). *DIGCOMP : A Framework for Developing and Understanding Digital Competence in Europe*. https://doi.org/10.2788/52966

Fitri, F. F., Aiman, R. M. P., Angelica, C. N. R., Putri, N. T. A., & Saraswati, K. D. H. (2023). Career Adaptability : Studi Deskriptif Pada Karyawan Gen Z. *Jurnal Ilmiah PSYCHE*, *17*, 39–56.

Ghozali, I., & Latan, H. (2015). *Partial Least Squares Konsep, Teknik dan Aplikasi Menggunakan Program SmartPLS 3.0 Edisi 2*. Badan Penerbit Undip.

Ghufron, M. A. (2018). Revolusi industri 4.0: peluang dan tantangan bagi dunia kerja. *Seminar Nasional Dan Diskusi Panel Multidisiplin Hasil Penelitian & Pengabdian Kepada Masyarakat*, 332–337.

Hair, J. F., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2017). *A Primer on Partial Least Squares Structural Equation Modeling*. SAGE Publications. https://doi.org/10.1016/j.lrp.2013.01.002

Hope, C., Nwakanma, A., Onyeonoru, I. P., Ugwumba, U., & Corresponding Author, I. (2022). *Outsourcing and Task Autonomy of Outsourced Staff: Evidence from Ecobank Southeast Nigeria*. *April*.

Huu, P. T. (2023). Impact of employee digital competence on the relationship between digital autonomy and innovative work behavior: a systematic review. *Artificial Intelligence Review*, *75*. https://doi.org/10.1007/s10462-023-10492-6

Indiarmeta, N., & Suyono, J. (2022). Effect of Use of Enterprise Social Media (ESM) on Employee Agility (Study on State Civil Apparatus in Ngawi Regency). *International Journal of Economics, Business and Management Research*, *06*(08), 204–219. https://doi.org/10.51505/ijebmr.2022.6815

Karim, A., & Laksmiwati, H. (2022). Hubungan antara Work Organization dengan Workforce Agility pada Usaha Kecil "X" di Surabaya The Relationship between Work Organization and Workforce Agility in Small Business, X, in Surabaya. *Jurnal Penelitian Psikologi* , *10*(01), 876–887.

Lai, H., Pitafi, A. H., Hasany, N., & Islam, T. (2021). Enhancing Employee Agility Through Information Technology Competency: An Empirical Study of China. *SAGE Open*, *11*(2). https://doi.org/10.1177/21582440211006687

Lian, B. (2019). REVOLUSI INDUSTRI 4.0 DAN DISRUPSI, TANTANGAN DAN ANCAMAN BAGI PERGURUAN TINGGI. *Prosiding Seminar Nasional Pendidikan Program Pascasarjana Universitas PGRI Palembang*.

Lim, Y. S., Halim, H. A., & Ramayah, T. (2021). Agile or not? The upsurge of digcomp and social

media usage among teachers. *Journal of Applied Structural Equation Modeling*, *5*(2), 1–21. https://doi.org/10.47263/JASEM.5(2)04

Mampuono, Mujiyanto, J., Rukmini, D., & Yuliasri, I. (2022). Promoting EFL Learners' Autonomy through Digital Literacy in Facing Industrial Revolution 4.0. *International Journal on Studies in English Language and Literature*, *10*(4), 26–33. https://doi.org/10.20431/2347-3134.1004004

Marguna, A. M. (2020). Pengaruh Kompetensi Digital (e-Skills terhadap Kinerja Pustakawan di UPT Perpustakaan Universitas Hasanuddin. *Jupiter*, *17*(2), 104–117. https://journal.unhas.ac.id/index.php/jupiter/article/view/12726

Morgeson, F. P., & Humphrey, S. E. (2006). The Work Design Questionnaire (WDQ): Developing and validating a comprehensive measure for assessing job design and the nature of work. *Journal of Applied Psychology*, *91*(6), 1321–1339. https://doi.org/10.1037/0021-9010.91.6.1321

Munteanu, A. I., Bibu, N., Nastase, M., Cristache, N., & Matis, C. (2020). Analysis of practices to increase the workforce agility and to develop a sustainable and competitive business. *Sustainability (Switzerland)*, *12*(9). https://doi.org/10.3390/SU12093545

Musah, & Ebikabowei. (2022). the Theory of Work Adjustment : the Nigerian Work Setting in the Theory of Work Adjustment : the Nigerian Work Setting in Perspective. *Global Scientific and Academic Research Journal of Multidisciplinary Studies*, *1*(June), 9–11.

Nadzim, S. Z. A., & Halim, H. A. (2022). The Mediating Role of Employee Agility on The Relationship between Digital Competency and Employee Performance among Civil Servants in Malaysian Public University. *An International Journal*, *14*(3s), 1457–1470.

Novianti, K. R., & Fuadiputra, I. R. (2021). The Effect of Job Autonomy on Turnover Intention: Mediation Role of Work-Life Balance, and Job Satisfaction in the Banking Sector. *International Journal of Social Science and Business*, *5*(4), 490. https://doi.org/10.23887/ijssb.v5i4.38855

Ochoa Pacheco, P., & Coello-Montecel, D. (2023). Does psychological empowerment mediate the relationship between digital competencies and job performance? *Computers in Human Behavior*, *140*(July 2022), 107575. https://doi.org/10.1016/j.chb.2022.107575

Parker, S. K., & Grote, G. (2022). Automation, Algorithms, and Beyond: Why Work Design Matters More Than Ever in a Digital World. *Applied Psychology*, 1171–1204. https://doi.org/10.1111/apps.12241

Pitafi, A. H., Kanwal, S., Akhtar, S., & Irfan, M. (2018). Investigating the employee work performance in task interdependence and ESM environment. *International Journal of Information Systems and Change Management*, *10*(3), 266–292. https://doi.org/10.1504/IJISCM.2018.096787

PPTI UNESA. (2017). *SSO UNESA*. PPTI UNESA. https://ppti.unesa.ac.id/post/sso-unesa

Ramadhan, A. N., & Muhyadi, M. (2021). Tuntutan Profesionalisme Bidang Administrasi Perkantoran Di Era Digital. *Jurnal Sekretaris & Administrasi Bisnis (JSAB)*, *5*(1), 29. https://doi.org/10.31104/jsab.v5i1.187

Raut, P. K., Das, J. R., Gochhayat, J., & Das, K. P. (2022). Influence of workforce agility on crisis management: Role of job characteristics and higher administrative support in public administration. *Materials Today: Proceedings*, *61*(May), 647–652. https://doi.org/10.1016/j.matpr.2021.08.121

Ravichandran, T. (2018). Exploring the relationships between IT competence, innovation capacity, and organizational agility. *Journal of Strategic Information Systems*, *27*(1). https://doi.org/10.1016/j.jsis.2017.07.002

Rohida, L. (2018). Pengaruh Era Revolusi Industri 4.0 terhadap Kompetensi Sumber Daya Manusia. *Jurnal Manajemen Dan Bisnis Indonesia*, *6*(1), 114–136. https://doi.org/10.31843/jmbi.v6i1.187

Sadijah, N. A., Simatupang, M., Nei, F., Ladapase, E. M., & Hemasti, R. A. G. (2023). Peran Employee Agility Terhadap Readiness To Change Pada Dosen. *Jurnal Ilmiah Global Education*, *4*(2), 565–571. https://doi.org/10.55681/jige.v4i2.558

Sadik Tatli, H., Sefa Yavuz, M., & Ongel, G. (2023). The Mediator Role of Task Performance in the Effect of Digital Literacy on Firm Performance. *Marketing and Management of Innovations*, *14*(2), 75–86. https://doi.org/10.21272/mmi.2023.2-08

Salmen, K., & Festing, M. (2022). Paving the way for progress in employee agility research: a systematic literature review and framework. *The International Journal of Human Resource Management*, *33*(22), 4386–4439. https://doi.org/10.1080/09585192.2021.1943491

Saputra, N., Nugroho, R., Aisyah, H., & Karneli, O. (2021). Digital Skill During Covid-19: Effects of Digital Leadership and Digital Collaboration. *Jurnal Aplikasi Manajemen*, *19*(2), 272–281. https://doi.org/10.21776/ub.jam.2021.019.02.04

Saputra, N., Patrick, G., & Ronald. (2022). Digital Competence as a Mediator for the Leadership in Empowering Workforce Agility. *Proceedings of 2022 International Conference on Information Management and Technology, ICIMTech 2022*, *October*, 612–617. https://doi.org/10.1109/ICIMTech55957.2022.9915161

Schwab, K. (2017). *The Fourth Industrial Revolution*. World Economic Forum.

Sherehiy, B., & Karwowski, W. (2014). The relationship between work organization and workforce agility in small manufacturing enterprises. *International Journal of Industrial Ergonomics*, *44*(3), 466–473. https://doi.org/10.1016/j.ergon.2014.01.002

Sherehiy, B., Karwowski, W., & Layer, J. K. (2007). A review of enterprise agility: Concepts, frameworks, and attributes. *International Journal of Industrial Ergonomics*, *37*(5), 445–460. https://doi.org/10.1016/j.ergon.2007.01.007

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

Sun, Y., Mengyi, Z., & Jeyaraj, A. (2023). How enterprise social media affordances affect employee agility: a self-determination theory perspective. *Information Technology and People*, *February*. https://doi.org/10.1108/ITP-04-2022-0306

Surani, D. (2019). Studi Literatur : Peran Teknologi Pendidikan. *Prosiding Seminar Nasional Pendidikan FKIP*, *2*(1), 456–469.

Tien, C. T., Hsu, K. C., & Hsing, Y. H. (2020). The Mediated Effect of Workforce Agility on the Relationship of IT Leveraging Competence and Entrepreneurship. *ACM International Conference Proceeding Series*, 110–113. https://doi.org/10.1145/3421682.3421699

Wahjunianto, H. (2022). Enrichment: Journal of Management Workforce Agility : Improving Employee Performance from the Perspective of a Competitive Work Environment. *Enrichment: Journal of Management*, *12*(5).

Wang, B., Liu, Y., & Parker, S. K. (2020). How does the use of information communication technology affect individuals? A work design perspective. *Academy of Management Annals*, *14*(2), 695–725. https://doi.org/10.5465/annals.2018.0127

Wei, C., Pitafi, A. H., Kanwal, S., Ali, A., & Ren, M. (2020). Improving Employee Agility Using Enterprise Social Media and Digital Fluency: Moderated Mediation Model. *IEEE Access*, *8*, 68799–68810. https://doi.org/10.1109/ACCESS.2020.2983480

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