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The Influence of Digital Work Environment, Job Autonomy, and Employee Technology Acceptance on Employee Digital Innovation of Generation Z Employees in MSME Startups

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Abstract: This research was conducted to find out the effect of Digital Work Environment, Job Autonomy, and Employee Technology Acceptance on Employee Digital Innovation of Generation Z workers in MSME businesses. This research was conducted by using a quantitative approach with survey technique on Generation Z workers who worked in different MSME startups in Indonesia. The sampling strategy used was purposive sampling. Data collection was conducted through the distribution of online questionnaires via Google Forms. Multiple linear regression was used for data analysis. The findings showed that Digital Work Environment, Job Autonomy, and Employee Technology Acceptance had a positive and significant effect on Employee Digital Innovation. The value of the coefficient of determination shows that the three independent variables can explain the variance of the Employee Digital Innovation. Of the three factors, the greatest effect on the growth of employee digital innovation is Employee Technology Acceptance. The research results show that the conducive digital working environment, the provision of job autonomy, and the high acceptance of technology are strategic factors to motivate generation Z employees to produce innovative technology-based ideas, processes, and solutions in the MSME startup environment.

Keywords: Digital Work Environment, Job Autonomy, Employee Technology Acceptance, Employee Digital Innovation

INTRODUCTION

The competition is becoming more dynamic and every company has to offer more and more creative products, services and business processes, in order to stay relevant to the constantly changing needs of the market (Latief et al., 2026). In this context, the capabilities of an organization are not only defined by its technology, but also by the potential of its

people resources to generate new ideas that can be turned into real advances (Fauzan & Apramilda, 2026). Generation Z is one of the key workforce groups in MSME startups now. This generation has grown in the rise of the digital technology and is characterized by the ability to adapt to the changes. This potential makes the Employee Digital Innovation a strategic lever to enhance the firm's competitiveness. Employee digital innovation is the ability of workers to generate, develop and implement innovative ideas through digital technology for the improvement of job performance, service quality and corporate results (Damanik et al., 2025; Estede et al., 2025). Firms that have high levels of employee digital innovation are able to respond more quickly to changes in the market, improve operational efficiency and deliver new value for consumers (Harahap et al., 2025; Nur et al., 2020).

One of the factors suspected of influencing Employee Digital Innovation in Generation Z workers in MSME startups is the Digital Work Environment (Syafri et al., 2025; Angriani et al., 2024). Digital work environment is a work environment supported by the use of digital technologies, integrated information systems, collaboration platforms and a work culture that promotes digital communication and learning (Suhara, 2025). The digital work environment allows workers to quickly find information, collaborate across geography and time, and increase productivity through the use of many digital apps (Musthafa et al., 2024). Generation Z have grown up with technology at their fingertips, and a digital work environment allows them more opportunity to be creative, to experiment with new ways of doing things and to come up with inventive solutions to a variety of work challenges (Sabilalo et al., 2020; Laliasa et al., 2018). Job Autonomy is also expected to influence Employee Digital Innovation among Gen Z workers in MSME firms (Fibriany et al., 2025; Kusnadi et al., 2025). Job autonomy refers to the degree to which a firm permits its employees to decide how, when and what means to use when carrying out their duties (Kholil & Wibowo, 2011). In general, the work atmosphere at startups is characterized by a more flexible organizational structure, which provides workers with more freedom for individual choices and innovative ideas (Wardani & Hendratni, 2023). One component could be the flexibility to work that Gen Z has to enhance intrinsic drive, the sense of ownership in the task and the courage of trying out numerous new ideas. Another factor that may affect Employee Digital Innovation is Employee Technology Acceptance. Employee technology acceptance is the acceptability and willingness of employees to use digital technology in support of their everyday job (Wahyoedi et al., 2024). In the startup atmosphere, the adoption of technologies is becoming more critical as most of the company operations are reliant on the use of digital apps, cloud computing, artificial intelligence, data analytics and many collaboration platforms (Mahrani et al., 2024). High levels of technology acceptance among employees mean they are more skilled at mastering new systems, more confident in their use of technology and more open to change in the business (Senoaji et al., 2024; Jaya et al., 2017).

This study aims to analyze the influence of Digital Work Environment, Job Autonomy and Employee Technology Acceptance on Employee Digital Innovation in MSME Startups to Generation Z employee. The research aims at better understanding the relationship between digital work environment, job autonomy, technology adoption and employee innovative behavior in startup based organizations. The expected result of the research is advice for MSME startup owners and management in the realistic creation of human resource management strategies that can support sustained digital innovation. Gen-Z workers expect to benefit from a supportive digital work environment, appropriate job autonomy and the embrace of technology through training and mentorship to enhance their digital innovation skills. This will enable organisations to be more competitive, accelerate digital transformation and promote sustainable corporate development.

METHOD

This study aims to analyze the influence of Digital Work Environment, Job Autonomy and Employee Technology Acceptance toward Employee Digital Innovation on Generation Z workers in MSME Startups. This research uses a quantitative approach with survey technique. The research population is Gen Z workers who work at various MSME companies in Indonesia that have applied digital technology in their operational activities. The sampling technique used is purposive sampling with the criteria for respondents, namely Generation Z who have worked in MSME startups for at least one year and use digital technology as part of their professional activities every day. The sample for the study was 200 respondents. Data collected by distributing an online questionnaire using Google Form. The Digital Work Environment variable was measured using the characteristics of digital infrastructure, digital collaboration, technological accessibility, digital communication and organizational digital support. Job Autonomy was measured by the characteristics of work schedule autonomy, decision-making autonomy and autonomy of work technique. Employee Technology Acceptance was studied by the criteria of perceived utility, perceived ease of use, behavioral intention to use and actual technology utilization. Meanwhile, the variable of Employee Digital Innovation was measured by the dimensions of digital idea creation, digital process innovation, digital problem solving, digital knowledge sharing and technology enabled creativity. All research indicators are measured using a 5-point Likert scale with the following scores: 1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, and 5 = strongly agree. Validity testing was done by comparing the significance value of each indicator with the significance level of 0.05. Reliability testing was done using Cronbach's Alpha with a minimum limit of 0.70. Multiple linear regression analysis was used for hypothesis testing and the significance level was set at 5%.

RESULTS AND DISCUSSION

Based on the processing of data from respondents who are members of Generation Z who work in various MSME startups in Indonesia, all of the research instruments meet the standards of validity and reliability so they are eligible to be used in the next stage of analysis. The results of multiple linear regression analysis show that Digital Work Environment, Job Autonomy and Employee Technology Acceptance have a positive and significant simultaneous effect on Employee Digital Innovation. The coefficient of determination result in this study is 0.524, it can be concluded that the three independent variables can explain the Employee Digital Innovation variable of 52.4%. The partial test results revealed that all independent variables has positive and significant effect on employee digital innovation, hence it can be assumed that all hypotheses of the research were properly accepted.

The results of this research show that the Digital Work Environment has a positive and significant effect on the Employee Digital Innovation of Generation Z employees in MSME startup. The study suggests that the use of digital technology, integrated communication systems, easy access to information and collaborative digital facilities work setting could create an environment conducive to fostering creative behavior amongst workers. It is said that generation Z, the digital natives, grew up with technology at an early age, and therefore they are more adaptable to various apps, collaboration platforms and digital work systems. Offering a modern, flexible and technologically driven working environment, businesses enable workers to better explore new ideas, discover innovative solutions to work problems and utilize technology as a tool to enhance the efficiency of business processes. Digital work environment not only hastens communication and information sharing but also a more collaborative work culture, accelerating learning and supporting innovative adoption . The MSME entrepreneur requires the digital work environment as an important foundation for sustained innovation in a dynamic and unpredictable business climate. Therefore, providing

technical infrastructure, interconnected information systems, and flexible digital work culture to improve the digital work environment is one of the key approaches to enhance the digital innovation skills of generation Z workers.

The results of the study indicate that job autonomy has a positive and significant effect on the digital innovation of generation Z employees in MSME companies. That is, the more freedom people have to choose how, when and with what tools they do their work, the more likely they are to generate more digital innovation. If workers are not tied down by strict rules they can try new ways, try better technologies and come up with creative solutions in their own way. This is particularly true for Generation Z, a cohort that has a tendency to place a premium on flexibility. When they have the duty to make independent judgements they tend to be more intrinsically driven, feel more ownership of their work and are more likely to investigate. Autonomy also improves learning as workers might adapt their work practices to the task and the constantly changing technology around them. In a startup environment, where speed, creativity and agility are crucial, continuous innovation facilitates work autonomy. But it is important that this freedom is matched by clear accountability so that people's innovative potential is used efficiently and makes a significant contribution to the company's success.

The study results show that the dominant variable of Generation Z employees' Employee Digital Innovation in MSME companies is Employee Technology Acceptance. Our results indicate that the use of digital technologies by employees is an important enabler of their ability to develop technology-based innovations. Workers who feel that technology is a helpful and easy-to-use tool that helps them do their job better are more likely to use multiple digital apps for their work and to come up with new ideas. High acceptance of technology also increases confidence in trying out new systems, reduces resistance to change and accelerates adoption of digital innovation at the workplace. The ability to accept and use technology optimally in MSME startups that are highly technology-dependent will not only improve operational efficiency but can also create opportunities for employees to develop a more innovative work process, create new services and improve the customer experience. The prevalence of this characteristic suggests that digital innovation is not only about the availability of technology, but also about the willingness of an individual to adopt, understand and use technology productively. Hence, organizations need to provide continuous training, assistance in technology use, user-friendly systems, and an organizational culture that is open to change to improve employee technology acceptance, thus continuously developing employee digital innovation capabilities and supporting the competitiveness of MSME startups in the digital economy era.

CONCLUSIONS AND RECOMMENDATIONS

Based on the research results that have been done, it can be concluded that the Digital Work Environment, Job Autonomy and Employee Technology Acceptance have a positive and significant effect on Employee Digital Innovation in Generation Z Employees in MSME Startups partially and simultaneously. This research also finds that the most important factor of Employee Digital Innovation is Employee Technology Acceptance. The great acceptance of technology is also stimulating the workers to accept more easily different types of digital applications, to use technology in work processes and to generate innovations that might improve organizational performance. The results of the study prove that practically the management of MSME startups need to create a digital work environment that can support collaboration and creativity, provide an adequate level of work autonomy so that employees can develop new ideas more flexibly, and increase technology acceptance through training, mentoring and provision of digital systems that are easy to use.

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