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# THE INFLUENCE OF SELF-LEADERSHIP AND DIGITAL LITERACY ON JOB PERFORMANCE: THE MEDIATING ROLE OF INNOVATION CAPABILITY (EVIDENCE FROM MSMES IN KEBUMEN REGENCY)

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*Abstract*

This study aims to examine the effect of self-leadership and digital literacy on job performance, with innovation capability as an intervening variable among MSME (UMKM) actors in Kebumen Regency. The population of this study comprised all MSME actors in Kebumen Regency. The sample was determined using the Slovin formula, resulting in 98 respondents. Data were collected through a questionnaire survey. The analysis employed validity and reliability tests, classical assumption tests, hypothesis testing, the Sobel test, and path analysis. Data processing was conducted using SPSS for Windows version 25.0.
The results indicate that: (1) self-leadership has a positive and significant effect on innovation capability; (2) digital literacy has a positive and significant effect on innovation capability; (3) self-leadership affects job performance; (4) digital literacy has a significant effect on innovation capability; and (5) innovation capability significantly affects job performance.

Keywords: self-leadership, digital literacy, innovation capability, job performance.

## INTRODUCTION

One of the main drivers of economic growth in many countries is supporting and encouraging improvements in SME performance. The development of MSMEs has been increasingly promoted by the government and relevant stakeholders to enhance the performance of this sector. Small and Medium Enterprises play an important role in Indonesia's economy. According to data from the Ministry of Cooperatives and Small and Medium Enterprises (KemenkopUKM) in March 2021, the number of MSMEs reached 64.2 million, contributing 61.07% to the Gross Domestic Product, equivalent to IDR 8,573.89 trillion. MSMEs are able to absorb 97% of the total workforce and account for up to 60.42% of total investment in Indonesia.

Many factors may explain why the competitiveness of MSMEs in Indonesia remains weak, such as low levels of productivity, innovation, and MSME performance (Sedyastuti, 2018; Susilo, 2012). In an era where information technology is developing rapidly, causing the business environment to become increasingly complex and competitive, all businesses—including MSMEs—are required to possess competitiveness and sustainable competitive advantages in order to survive and compete. To encourage improvements in MSME performance, the role of business actors who have a significant influence on MSME sustainability is essential.

The increasingly dynamic business environment requires organizations to have human resources who are able to adapt, innovate, and demonstrate high job performance (see, for example, Knezović & Dragičević, 2022). According to Abubakre and Muazu (2025), digital transformation, changes in business models, and global competition position individuals' capabilities in self-management, mastery of digital technologies, and the generation of innovative ideas as key factors in sustaining organizational viability and maintaining competitive advantage.

In this context, attention to employees' innovative behavior has increased significantly because innovation at the individual level is considered to contribute directly to organizational performance (Knezović & Dragičević, 2022). A review study by Abubakre and Muazu (2025) indicates that innovation emerging from organizational members plays an important role in creating products and processes that are difficult for competitors to imitate. Therefore, understanding the factors that drive innovation capability and its impact on job performance has become an increasingly relevant research agenda (Knezović & Dragičević, 2022; Abubakre & Muazu, 2025).

One personal factor that has been widely examined as a determinant of innovative behavior and innovation capability is self-leadership (Knezović & Dragičević, 2022). According to Neck and Houghton (2006, as cited in Knezović & Dragičević, 2022), self-leadership is understood as an individual's ability to lead oneself through the regulation of behavior, cognition, and internal motivation in order to achieve work goals optimally. This approach emphasizes that leadership does not solely originate from formal superiors, but also from employees' ability to manage themselves independently and proactively (Manz, 1986, as cited in Knezović & Dragičević, 2022).

Recent research by Knezović and Dragičević (2022) shows that self-leadership has a positive effect on employees' innovative behavior. Individuals with high levels of self-leadership tend to use learning strategies and self-reflection that encourage the emergence of new ideas, experimentation with alternative ways of working, and continuous process improvement (Knezović & Dragičević, 2022). This indicates that self-leadership not only enhances work motivation but also fosters innovative behavior, which forms part of an individual's innovation capability (Knezović & Dragičević, 2022).

In addition, self-leadership has been shown to have a direct effect on employee performance. According to Pratama and Sugiyanto (2021), self-leadership has a positive and significant effect on employee performance, both directly and through intrinsic motivation. These findings emphasize that individuals who are able to lead themselves tend to be more focused, committed, and capable of achieving work targets effectively (Pratama & Sugiyanto, 2021).

Self-leadership is also associated with various dimensions of work role performance, such as task proficiency, task adaptivity, and task proactivity, particularly in the context of remote work (Kovačević et al., 2022). The study by Kovačević et al. (2022) shows that self-leadership enhances psychological empowerment, which in turn encourages employees to demonstrate better work role performance. This indicates that self-leadership is relevant not only in traditional work settings but also in flexible, technology-based work environments (Kovačević et al., 2022).

On the other hand, digital literacy has emerged as a key competency in the era of Knowledge Society 5.0 and Industry 5.0 (Abubakre & Muazu, 2025). According to Abubakre and Muazu (2025), digital literacy is viewed as the ability to use, understand, and manage digital technologies effectively in daily work activities. Employees with strong digital literacy can more easily adapt to technology-based work systems and leverage digital data and information to improve decision quality and performance (Abubakre & Muazu, 2025).

A systematic review conducted by Abubakre and Muazu (2025) shows that digital literacy plays an important role in improving employability and fostering innovative work behavior in modern workplaces. However, they also note that standardized instruments linking digital literacy to employability and innovative behavior remain limited, particularly in business contexts (Abubakre & Muazu, 2025). This condition creates opportunities for further research that examines the role of digital literacy in innovation capability and job performance more specifically (Abubakre & Muazu, 2025).

The relationship between digital literacy and innovative behavior is further supported by the findings of Kim and Lee (2025), which show that digital literacy can enhance creative self-efficacy and ultimately foster innovative behavior. According to Kim and Lee (2025), individuals who possess strong digital skills tend to be more confident in exploring technology, combining information, and generating creative solutions in their work. Therefore, digital literacy serves as an important foundation for the development of innovation capability at the individual level (Kim & Lee, 2025).

Digital literacy is not only associated with innovative behavior but also with performance. Abubakre and Muazu (2025) show that digital literacy contributes to improved performance because it enables workers to use technology to work more quickly, accurately, and collaboratively. This indicates that digital literacy has the potential to be an important factor influencing job performance, both directly and through enhancements in innovation capability (Abubakre & Muazu, 2025).

In addition to self-leadership and digital literacy, individual innovation capability holds a strategic position as a bridge between personal characteristics and performance outcomes (Knezović & Dragičević, 2022). Innovation capability can be understood as an individual's ability to generate, develop, and implement new ideas within the context of their work (Janssen, 2000, as cited in Knezović & Dragičević, 2022). Various studies position innovative behavior as a tangible manifestation of innovation capability that contributes to organizational effectiveness and competitive advantage (Knezović & Dragičević, 2022; Abubakre & Muazu, 2025).

Research indicates that employees' innovative behavior plays a role in improving both organizational performance and individual performance (Knezović & Dragičević, 2022). Innovation carried out by workers—whether in the form of process improvements, product development, or new ways of working—can generate efficiency, service quality, and added

value for customers (Abubakre & Muazu, 2025). Therefore, innovation capability can be positioned as a factor that links personal resources such as self-leadership and digital literacy to performance outcomes (Knezović & Dragičević, 2022).

Studies on self-leadership and performance indicate mediation mechanisms through psychological and behavioral variables such as intrinsic motivation, work engagement, and informal learning (Pratama & Sugiyanto, 2021; Knezović & Dragičević, 2022). For example, Bakker et al. (2021) found that self-leadership enhances work engagement, which subsequently contributes to higher work performance and employees' normative commitment. These findings suggest that the effect of self-leadership on performance is not always direct but often operates through specific mediators (Pratama & Sugiyanto, 2021).

In the context of innovation, Knezović and Dragičević (2022) found that informal learning mediates the relationship between self-leadership and innovative behavior. Individuals with high self-leadership tend to be more active in informal learning, engaging in discussions, self-reflection, and experimentation, thereby enhancing their ability to innovate (Knezović & Dragičević, 2022). This pattern supports the argument that self-leadership can contribute to innovation capability, which ultimately affects job performance (Knezović & Dragičević, 2022).

In addition to personality and psychological factors, digital literacy can also act as a mediator in the relationship between employee competencies and performance. According to Angeles and Austria (2021), a study examining employee engagement and ability in relation to employee performance—with digital literacy as a mediating variable—shows that digital literacy strengthens the effects of these factors on performance. This reinforces the view that digital aspects cannot be separated from discussions of performance in the era of digital transformation (Angeles & Austria, 2021).

Another study by Łukasik and Zastempowski (2024) highlights the importance of digital talent and innovation capability in the context of digital transformation in human resources, particularly in small and medium-sized enterprises (SMEs). They found that the digitalization of human capital and the development of digital talent contribute to stronger innovation capabilities, which in turn support organizational performance and competitiveness (Łukasik & Zastempowski, 2024). These findings confirm that digital capability and innovation capability are interconnected in producing superior organizational outcomes (Łukasik & Zastempowski, 2024).

Although various studies have examined the relationship between self-leadership and performance or innovative behavior, and between digital literacy and employability as well as innovative work behavior, research that simultaneously tests the effects of self-leadership and digital literacy on job performance through innovation capability remains relatively limited (Pratama & Sugiyanto, 2021; Abubakre & Muazu, 2025; Knezović & Dragičević, 2022). Many studies focus on a single pathway, such as self-leadership to performance or digital literacy to innovative behavior, without integrating these two personal factors into a comprehensive model (Pratama & Sugiyanto, 2021; Kim & Lee, 2025).

This gap provides an opportunity to develop a research model that positions innovation capability as an intervening variable between self-leadership and digital literacy in their effects on job performance (Knezović & Dragičević, 2022; Abubakre & Muazu, 2025). Such a model enables testing whether the influence of self-leadership and digital literacy on performance is partially or fully explained by individuals' ability to innovate in their work (Knezović & Dragičević, 2022). In addition, the model can offer a deeper understanding of the psychological

and behavioral mechanisms underlying the relationship between personal characteristics and performance outcomes (Pratama & Sugiyanto, 2021; Knezović & Dragičević, 2022).

In the Indonesian organizational context, particularly in sectors that are actively pursuing digital transformation, testing this model becomes increasingly relevant (Angeles & Austria, 2021; Łukasik & Zastempowski, 2024). Organizations need employees who are not only capable of leading themselves but also possess adequate digital literacy and are able to generate innovations that create added value (Abubakre & Muazu, 2025; Kim & Lee, 2025). Therefore, research on the effects of self-leadership and digital literacy on job performance with innovation capability as an intervening variable is expected to provide theoretical and practical contributions to the development of human resource management (Pratama & Sugiyanto, 2021; Knezović & Dragičević, 2022).

Based on the above discussion, it is of interest to conduct a study that empirically examines how self-leadership and digital literacy influence job performance through innovation capability as an intervening variable. This study is expected to address gaps in the literature, enrich existing models of relationships among the variables, and provide recommendations for organizations in designing employee development interventions oriented toward improving performance and innovation in the digital era (Pratama & Sugiyanto, 2021; Abubakre & Muazu, 2025; Knezović & Dragičević, 2022).

## LITERATURE REVIEW

### Job Performance

Job performance is generally understood as a set of work behaviors that are relevant to organizational goals and are under an individual's control. Campbell (1990, as cited in Sobaiha & Gabry, 2019) defines job performance as behaviors or actions that are relevant to organizational goals and serve as the basis for assessing the extent to which individuals contribute to achieving organizational objectives.

According to Rotundo and Sackett (2002), job performance includes actions that are under an individual's control and contribute to organizational goals, either in the form of outcomes or measurable behaviors. Viswesvaran and Ones (2000) emphasize that performance comprises scalable actions and results produced by employees that are related to organizational objectives.

In subsequent developments, researchers have distinguished between task performance and contextual performance in measuring job performance. Task performance refers to behaviors that are directly related to completing the core duties of a job, while contextual performance includes extra-role behaviors such as helping coworkers and demonstrating organizational commitment (Sobaiha & Gabry, 2019).

Another source describes job performance as the level of effectiveness and productivity demonstrated by individuals in their roles, including the achievement of targets, fulfillment of responsibilities, and contributions to organizational success (Fiveable, 2021). This perspective emphasizes that performance is not measured solely by quantitative output, but also by the quality of behaviors and contributions to the work environment.

In the context of human resource management, job performance is often operationalized through indicators such as work quality, work quantity, timeliness, teamwork, and responsibility (e.g., in studies of job analysis and employee performance). Various studies show that employee

performance is influenced by individual, situational, and organizational factors, including leadership, competence, motivation, and organizational support.

**Innovation Capability**

Individual level innovation capability refers to a person's ability and willingness to generate, develop, and implement new ideas that contribute to the advancement of an organization or society. According to the review titled "Measuring Innovation Capability on Individual Level," individual innovation capability does not only involve creativity, but also includes motivation, behavior, and contextual factors that support innovation (As-Proceeding, 2023).

In the innovation literature, an individual's capacity to innovate is viewed as an important prerequisite for organizational adaptability, problem-solving, and the sustainability of competitive advantage. Individual innovation capability encompasses aspects such as creative thinking ability, risk-taking courage, the ability to identify opportunities, and the willingness to implement new ideas in work practices (As-Proceeding, 2023).

At a broader level, innovation capability is also understood as an adaptive and systemic competence that enables organizations to continuously develop and implement new ideas through sustained institutional processes (for example, in the public sector context). This perspective positions individuals' innovative activities as an important component in shaping organizational innovation capability (When Routines Innovate, 2024).

In the workplace, innovation capability is often manifested through innovative work behavior, namely behaviors that involve problem identification, idea generation, idea promotion, and the implementation of new solutions (Janssen, 2000, as cited in Knezović & Dragičević, 2022). Research indicates that employees' innovative behavior contributes to process efficiency, service quality, and value creation, thereby implying improvements in organizational performance.

A systematic review of the dimensions of innovation capabilities emphasizes that individual activities constitute one of the main dimensions of innovation capability, alongside structural and process dimensions (e.g., in systematic reviews on innovation capabilities). This highlights that the development of innovation capability cannot be separated from strengthening employees' innovative abilities as the key actors in the innovation process.

**Self Leadership**

Self-leadership is viewed as a process of self-influence in which individuals direct and motivate themselves to achieve self-direction and self-motivation at work. Neck and Houghton (2006) describe self-leadership as a set of behavioral and cognitive strategies used by individuals to manage themselves, including personal goal setting, self-regulation, and self-reinforcement.

Historically, the concept of self-leadership developed from the idea of self-management and was strengthened by self-regulation theory and social cognitive theory, which emphasize the role of individuals in controlling their own thoughts, emotions, and behaviors (Neck & Houghton, 2006). Within this framework, self-leadership is regarded as a normative concept that provides guidance on how individuals should regulate themselves in order to enhance performance and psychological well-being.

Self-leadership strategies are generally grouped into three main categories: behavior-focused strategies, natural reward strategies, and constructive thought pattern strategies (Neck

& Houghton, 2006). Behavior-focused strategies help individuals monitor and direct their behavior through self-goal setting, self-observation, and self-reward; natural reward strategies focus on identifying enjoyable aspects of tasks; while constructive thought pattern strategies help shape positive thinking patterns through self-talk and mental imagery.

According to Manz and Neck (2004, as cited in Neck & Houghton, 2006), self-leadership is closely related to intrinsic motivation because it emphasizes the importance of feeling competent and autonomous at work. When individuals are able to structure tasks in ways that enhance their sense of competence and control, this is expected to increase performance and job satisfaction.

Various empirical studies show that self-leadership is positively correlated with a range of outcomes, including work performance, work engagement, and innovative behavior (Knezović & Dragičević, 2022; Pratama & Sugiyanto, 2021). For example, self-leadership has been found to enhance psychological empowerment and work engagement, which subsequently influence employees' work role performance and innovative behavior.

**Literasi Digital**

Digital literacy essentially refers to an individual's ability to use, understand, and manage digital technologies effectively in everyday life and work. According to Ferrari (2013, as cited in Abubakre & Muazu, 2025), digital literacy includes the skills to access, evaluate, create, and share information through digital technologies while taking into account security and ethical aspects.

In a systematic review of digital literacy, employability, and innovative work behavior, Abubakre and Muazu (2025) emphasize that digital literacy is a key competency in the digital workplace because workers are required to operate devices, manage data, and adapt to various applications and platforms. They argue that digital literacy highlights proficiency in using digital technologies when accessing and searching for information, protecting personal data, and solving technology-based problems (Schauffel et al., 2021; Ferrari, 2013, as cited in Abubakre & Muazu, 2025).

Van Laar et al. (2017, as cited in Abubakre & Muazu, 2025) add that digital literacy also includes critical thinking, communication, collaboration, and creativity skills in digital environments. Thus, digital literacy is not only related to technical abilities but also to the soft skills needed to participate productively in the digital economy.

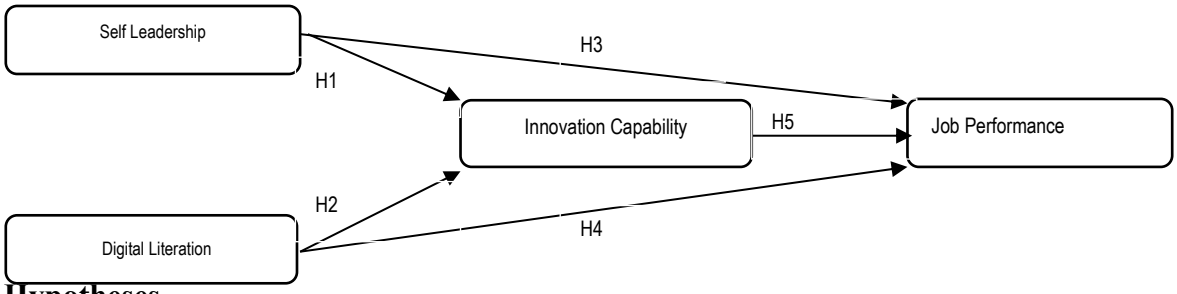
Recent studies show that digital literacy is closely associated with employability and innovative work behavior. Abubakre and Muazu (2025) found that workers with high levels of digital literacy are better able to leverage digital information to learn, collaborate, and develop innovative solutions in the workplace. This indicates that digital literacy contributes to the enhancement of innovation capability and performance outcomes in digitalized work environments.

Another study shows that digital literacy influences creative self-efficacy and ultimately fosters innovative behavior (Kim & Lee, 2025). Digitally skilled individuals tend to be more confident in exploring technology and combining information, making them more likely to generate new ideas that are valuable to organizations. In the context of human resource management, digital literacy has also been found to mediate the relationship between engagement and ability and employee performance, indicating its strategic role in improving employee performance (Angeles & Austria, 2021).

## Empirical Model

Based on the theoretical foundation discussed earlier regarding the effects of self-leadership and digital literacy on job performance through innovation capability, an empirical model can be developed as illustrated below.

**Figure 1. Empirical Model**




## Hypotheses

Based on the empirical model above, the research hypotheses are formulated as follows:

H1: Self-leadership has an effect on the innovation capability of MSME actors.
H2: Digital literacy has an effect on the innovation capability of MSME actors.
H3: Self-leadership has an effect on the job performance of MSME actors.
H4: Digital literacy has an effect on the job performance of MSME actors.
H5: Innovation capability has an effect on the job performance of MSME actors.

# RESEARCH METHOD

## Research Object and Subject

The object of this study is the effect of self-leadership and digital literacy on job performance through innovation capability. The subjects and population of this study are MSME (UMKM) actors in Kebumen Regency.

## Sampling Technique

The sampling method used in this study is probability sampling. In this case, the research sample consists of 97 MSME actors in Kebumen Regency.

## Data Analysis Tools

The data analysis techniques include data quality testing (validity and reliability tests), classical assumption tests (multicollinearity, heteroscedasticity, and normality tests), hypothesis testing (partial t-test), coefficient of determination, correlation analysis, and path analysis using SPSS 25.00.

# ANALYSIS AND DISCUSSION

## Validity and Reliability Tests

An instrument is considered valid if it is able to measure what is intended and accurately capture data from the variables being studied. The method used is item analysis, in which each item score for a given variable is tested using the Pearson Correlation formula. The minimum requirement for validity is that the calculated r value (r count) is greater than the r table value. In this study, the r table value was 0.2287 based on 97 respondents. The results of the validity

test indicate that all variables—self-leadership, digital literacy, innovation capability, and job performance—are valid.

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**Tabel 1 Reliability Test Results**

| Variabel | Alpha Cronbach | Nilai Kritis | Keterangan |
|---|---|---|---|
| *self leadership* | 0,775 | 0,60 | Reliabel |
| *literasi digital* | 0,695 | 0,60 | Reliabel |
| *innovation capability* | 0,743 | 0,60 | Reliabel |
| *job performance* | 0,878 | 0,60 | Reliabel |

It can be concluded that the statements used for all variables are reliable. This is indicated by the Cronbach's alpha values, which are greater than 0.60.

**Multicollinearity Test**

**Table 2. Multicollinearity Test for Structural Model I**

| No | Variabel Bebas | Collinierity Statistic | |
|---|---|---|---|
| | | Tolerance | VIF |
| 1 | *self leadership* | .813 | 1.230 |
| 2 | *literasi digital* | .813 | 1.230 |

**Table 3. Multicollinearity Test for Structural Model II**

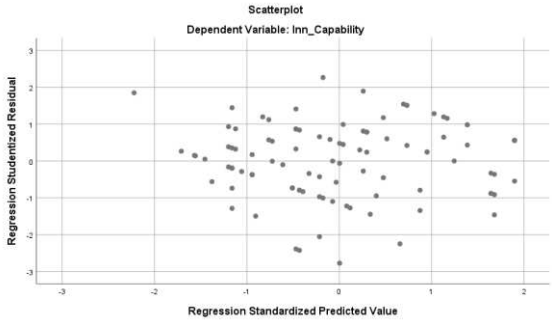
| No | Variabel Bebas | Collinierity Statistic | |
|---|---|---|---|
| | | Tolerance | VIF |
| 1 | *self leadership* | .694 | 1.442 |
| 2 | *literasi digital* | .669 | 1.495 |
| 3 | *innovation capability* | .595 | 1.682 |

Based on Table 2 and Table 3, the tolerance values are above 0.10 and the VIF values are below 10, indicating that there is no multicollinearity in the regression model.

**Heteroscedasticity Test**

This test is conducted to examine whether, in a regression model, there is inequality of variance in the residuals from one observation to another.

**Figure 2. Heteroscedasticity Test for Structural Equation I**

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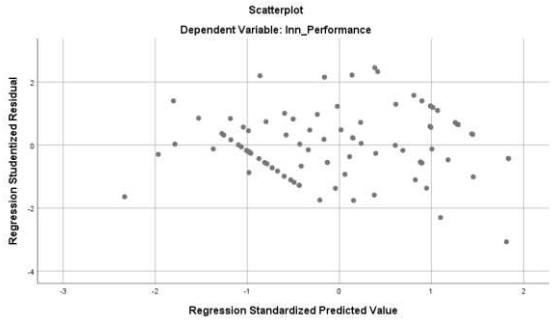



Based on the figure above, there is no specific pattern, such as points forming a regular pattern (widening or narrowing). Since no clear pattern is observed, it can be concluded that the regression model in this study does not exhibit heteroscedasticity.

**Normality Test**

To examine whether the data are normally distributed, a normal probability plot can be used.

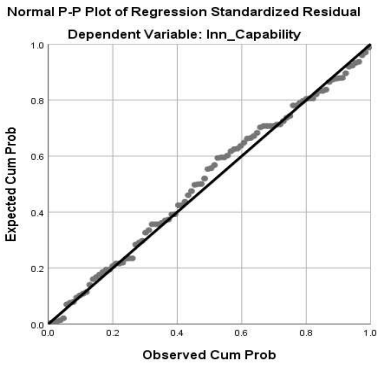



**Figure 4. Normality Test for Structural Equation I**

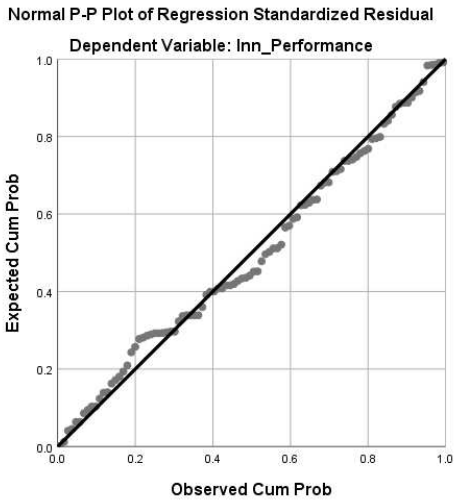



**Figure 5. Normality Test for Structural Equation I**

Based on the figure above (Normal P–P Plot of Standardized Residuals), the data points are distributed around the diagonal line and follow its direction. Therefore, the regression model meets the assumption of normality.

## t-Test (Partial)

The partial test is used to examine the partial significance of the effect of the independent variables on the mediating variable and the dependent variable.

**Table 4. t-Test for Structural Equation I**

| Model | | Unstandardized Coefficients | | Standardized Coefficients | T | Sig. |
|---|---|---|---|---|---|---|
| | | B | Std. Error | Beta | | |
| 1 | (Constant) | 4.220 | 2.007 | | 2.103 | .038 |
| | Self_Leadership | .330 | .082 | .355 | 4.044 | .000 |
| | Lit_Digital | .387 | .086 | .397 | 4.525 | .000 |

a. Dependent Variabel : Inn_Capability

Based on the regression analysis results in the table above, it can be seen that:

1. The self-leadership variable has a calculated t value of 4.044, which is greater than the t table value of 2.021, with a significance level of 0.000, which is less than α = 0.05. This means that self-leadership has an effect on innovation capability.
2. The digital literacy variable has a calculated t value of 4.525, which is greater than the t table value of 2.021, with a significance level of 0.000, which is less than α = 0.05. This means that digital literacy has a positive and significant effect on innovation capability.

**Table 4. t-Test for Structural Equation II**

| Model | | Unstandardized Coefficients | | Standardized Coefficients | T | Sig. |
|---|---|---|---|---|---|---|
| | | B | Std. Error | Beta | | |
| 1 | (Constant) | -3.830 | 1.699 | | -2.255 | .026 |
| | Self_Leadership | .016 | .073 | .012 | .217 | .829 |
| | Lit_Digital | .806 | .078 | .594 | 10.319 | .000 |
| | Inn_Capability | .563 | .085 | .405 | 6.633 | .000 |

a. Dependent Variabel: job_Performance

Based on the regression analysis results in the table above, it can be seen that:

1. The self-leadership variable has a calculated t value of 0.012, which is lower than the t table value of 2.021, with a significance level of 0.829, which is greater than $\alpha = 0.05$. This means that self-leadership does not have a significant effect on job performance.
2. The digital literacy variable has a calculated t value of 10.319, which is greater than the t table value of 2.021, with a significance level of 0.000, which is less than $\alpha = 0.05$. This means that digital literacy has a significant effect on job performance.
3. The innovation capability variable has a calculated t value of 6.633, which is greater than the t table value of 2.021, with a significance level of 0.000, which is less than $\alpha = 0.05$. This means that innovation capability has a significant effect on job performance.

## Coefficient of Determination Analysis

**Table 6. Coefficient of Determination Test for Structural Equation I**

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate |
|---|---|---|---|---|
| 1 | .637 | .405 | .393 | 1.85509 |

Predictors: (Constant), Lit_Digital, Self_Leadership
Dependent Variable: Inn_Capability

Based on the table above, the Adjusted R-squared value is 0.393, meaning that the contribution of self-leadership and digital literacy to innovation capability among MSME actors in Kebumen is 39.3%, while the remaining (100 − 39.3) = 60.7% is influenced by other variables outside the model.

**Table 7. Coefficient of Determination Test for Structural Equation I**

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate |
|---|---|---|---|---|
| 1 | .890 | .792 | .785 | 1.53519 |

Predictors: (Constant), Inn_Capability, Self_Leadership, Lit_Digital
a. Dependent Variable: Inn_Performance

Based on the table above, the Adjusted R-squared value is 0.785, meaning that the contribution of self-leadership, digital literacy, and innovation capability to innovation performance is 78.5%, while the remaining (100 − 78.5) = 21.5% is influenced by other variables outside the model.

**Correlation Analysis**

**Table 8. Correlation Analysis**

| | | Self_ Leadership | Lit_ Digital | Inn_ Capability |
|---|---|---|---|---|
| Self_Leadership | Pearson Correlation | 1 | .432** | .526** |
| | Sig. (2-tailed) | | .000 | .000 |
| | N | 98 | 98 | 98 |
| Lit_Digital | Pearson Correlation | .432** | 1 | .550** |
| | Sig. (2-tailed) | .000 | | .000 |
| | N | 98 | 98 | 98 |
| Inn_Capability | Pearson Correlation | .526** | .550** | 1 |
| | Sig. (2-tailed) | .000 | .000 | |
| | N | 98 | 98 | 98 |

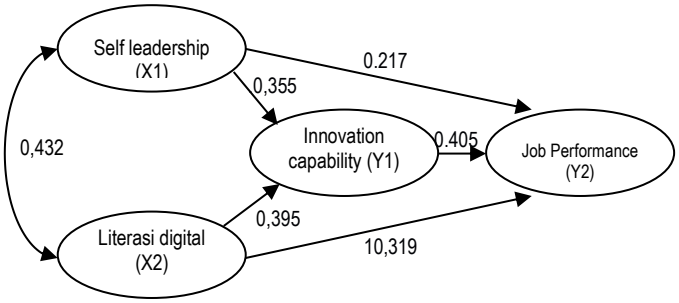
**. Correlation is significant at the 0.01 level (2-tailed).

The correlation coefficient between the self-leadership and digital literacy variables is 0.432, indicating a moderately strong correlation between the variables. The correlation coefficient between self-leadership and innovation capability is 0.526, indicating a moderately strong correlation between the variables.

**Path Analysis Diagram**

A path diagram is used to help conceptualize a problem or test complex hypotheses, as well as to identify the direct and indirect effects of the independent variables on the dependent variable.

**Figure. Path Analysis Diagram**




Based on the path analysis diagram above, it can be explained that the self-leadership variable has an effect of 0.355 on innovation capability; the digital literacy variable has an effect of 0.395 on innovation capability; self-leadership has an effect of 0.217 on job performance; digital literacy has an effect of 10.319 on job performance; and innovation capability has an effect of 0.405 on job performance.

## Managerial Implications

1. **The Effect of Self-Leadership on the Innovation Capability of MSME Actors**

   The first hypothesis test was conducted to examine the effect of self-leadership on innovation capability. Based on the t-test results, the calculated t value was 4.044, which is greater than the t table value of 2.021, with a significance level of 0.000, which is less than 0.05. This indicates that self-leadership has a significant effect on innovation capability; therefore, H1 is accepted. This means that self-leadership practiced by MSME actors can enhance their innovation capability.

2. **The Effect of Digital Literacy on the Innovation Capability of MSME Actors**

   Based on the analysis and discussion, it is proven that the hypothesis regarding digital literacy has a positive and significant effect on innovation capability. This is indicated by a calculated t value of 4.525, which is greater than the t table value of 2.021, with a significance level of 0.000, which is less than 0.05; therefore, H2 is accepted. This means that digital literacy has a significant effect on innovation capability. These results indicate that the digital literacy possessed by MSME actors can lead to an improvement in their innovation capability.

3. **The Effect of Self-Leadership on the Job Performance of MSME Actors**

   Based on the analysis and discussion, it is shown that the self-leadership hypothesis does not have an effect on job performance. This is indicated by a calculated t value of 0.217, which is lower than the t table value of 2.021, with a significance level of 0.829, which is greater than 0.05; therefore, H3 is rejected. This means that self-leadership does not significantly affect job performance. These results indicate that the self-leadership possessed by MSME actors has not yet been able to contribute to an improvement in job performance.

4. **The Effect of Digital Literacy on the Job Performance of MSME Actors**
   Based on the analysis and discussion above, it is proven that the digital literacy hypothesis has a positive and significant effect on job performance. This is indicated by a calculated t value of 10.319, which is greater than the t table value of 2.021, with a significance level of 0.000, which is less than 0.05; therefore, H4 is accepted. This means that the digital literacy possessed by MSME actors is able to improve job performance.
5. **The Effect of Innovation Capability on the Job Performance of MSME Actors**
   Based on the analysis and discussion above, it is shown that the innovation capability hypothesis has a significant effect on job performance. This is indicated by a calculated t value of 6.633, which is greater than the t table value of 2.021, with a significance level of 0.000, which is less than 0.05; therefore, H5 is accepted. This means that innovation capability has a significant effect on job performance.

## CONCLUSIONS AND RECOMMENDATIONS

### Conclusions

Based on the results of the analysis and discussion, the following conclusions can be drawn:

1. Self-leadership has a significant effect on innovation capability, indicating that self-leadership practiced by MSME actors can enhance their innovation capability.
2. Digital literacy has a significant effect on innovation capability. This means that the digital literacy possessed by MSME actors can improve their innovation capability.
3. Self-leadership does not have a significant effect on job performance. This indicates that the self-leadership possessed by MSME actors has not yet been able to improve job performance.
4. Digital literacy has a positive and significant effect on job performance, indicating that the digital literacy possessed by MSME actors is able to improve job performance.
5. Innovation capability has a significant effect on job performance, meaning that innovation capability significantly influences job performance.

### Recommendations

The researcher proposes several recommendations as follows:

1. Self-Leadership

The findings show that self-leadership has a significant effect on MSME actors' innovation capability ($p < 0.05$), but it does not have a significant direct effect on job performance. This finding is consistent with Knezović and Dragičević (2022), who found that self-leadership enhances innovative behavior through informal learning. Therefore, MSME actors are advised to optimize self-leadership specifically for innovation—for example, by setting monthly targets for new product development, documenting trial-and-error processes, and giving themselves self-rewards when they successfully implement innovative ideas. They should avoid relying on self-leadership for day-to-day operational performance such as routine sales or inventory management; instead, they should focus it on creating added value through product and process innovation.

2. Digital Literacy

Digital literacy has been proven to have a significant effect on both the innovation capability and job performance of MSME actors (both $p < 0.05$), making it the most strategic factor. This is consistent with Abubakre and Muazu (2025), who state that digital literacy improves employability and innovative work behavior. MSME actors should prioritize improving digital literacy by: (1) participating in marketplace training programs (e.g., Tokopedia Seller Academy, Shopee University), (2) learning digital marketing (e.g., Instagram Ads, TikTok Shop), (3) adopting digital financial tools (e.g., Jurnal.id, Moka POS), and (4) utilizing Google My Business to increase local visibility. Every 10% improvement in digital literacy has the potential to increase revenue and innovation simultaneously.

3. Innovation Capability

Innovation capability serves as a significant mediator between self-leadership/digital literacy and job performance, in line with Knezović and Dragičević's (2022) findings on innovative behavior as an outcome of self-leadership. MSME actors are advised to activate innovation capability systematically through: (1) weekly ideation (brainstorming three new product/process ideas), (2) rapid prototyping (testing ideas with capital of less than IDR 500,000), (3) a feedback loop (interviewing five customers per week), and (4) innovation documentation (an innovation journal). Innovation capability is a "golden bridge" that transforms personal skills into real business performance—each successfully implemented idea can improve efficiency by 20–30%.

4. Job Performance

Digital literacy has a significant direct effect on job performance ($p < 0.05$), while self-leadership is not significant, indicating that in the MSME context, digital capability is more crucial than self-leadership for operational outcomes. Pratama and Sugiyanto (2021) support the view that external factors (such as technical skills) can be more determinant of performance than internal factors in dynamic environments. MSME actors should focus on improving job performance through operational digitalization by: (1) achieving ≥ 50% digital revenue within six months, (2) managing inventory in real time via an application, (3) implementing automated customer service (WhatsApp chatbot), and (4) conducting weekly sales data analysis for faster decision-making. A realistic target is a 30% increase in revenue within three months after digitalization.

5. For future research.

   The finding that self-leadership does not have a direct effect on job performance opens opportunities for further studies to identify new mediating variables. Future researchers are advised to examine work engagement, entrepreneurial alertness, or business networking as mediators in the pathway from self-leadership to innovation capability and job performance.

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