The Influence of Creative Self-Efficacy on Employee Performance through Innovative Work Behavior as Mediating and Digital Literacy as Moderating

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ABSTRACT: Many factors often influence employee performance, but many company leaders must learn more about the benefits. This research aims to determine the influence of creative self-efficacy on employee performance through the mediating effect of innovative work behavior and the moderating effect of digital literacy. The primary data was obtained through questionnaires to 120 employees who work at the Iskandar Muda Pupuk Company in Aceh. This research uses the Structural Equation Model-Partial Least Square (SEM-PLS) model using the Smart-PLS device. The research results found that creative self-efficacy positively and significantly affects innovative work behavior and employee performance. Furthermore, innovative work behavior directly has a significant effect on employee performance. Indirectly, it was found that digital literacy does not moderate the effect of innovative work behavior on employee performance. Based on the results of this research, it is recommended that leaders be able to provide full support to employees in carrying out their work, significantly increasing innovative work behavior through the use of literacy tools to support employee work.

KEYWORDS: creative self-efficacy, innovative work behavior, digital literacy, employee performance

I. BACKGROUND

High performance is essential in maintaining company sustainability, and business leaders need to understand the main benefits of employee performance to develop consistent and objective methods for evaluating employees (De Waal & Van Der Heijden, 2015). When employees do not work effectively, customers feel that the Company is apathetic to their needs and will look elsewhere for help. The customer service department will constantly observe if it looks unprofessional and perhaps incompetent. (Shahzadi et al., 2014)

Employees who do their work creatively and effectively are highly motivated to complete it. However, employees who are not motivated to complete the work as assigned can bring down the entire department. Therefore, fostering a positive, energetic, and innovative work environment is very important. (Elsbach & Hargadon, 2006).

Employees who can produce high performance are those who have creativity and innovation. Creativity and innovation are the lifeblood of organizations in achieving success (Diliello et al., 2011). Activities such as creativity and innovation are crucial to achieving change in this demanding situation. Creativity is needed to generate new and cognitively valuable ideas. (Mumford & Gustafson, 1988)

According to (Coelho et al., 2011), creativity is (only) the first step. Consequently, innovation is a secondary activity necessary for companies to face unstable environments. Innovation includes activities that are related to the actual implementation of creative ideas. Technology is essential in creativity that determines a company's survival (Spanuth & Wald, 2017). Continuous breakthroughs and innovation are needed to drive companies and employees who play a crucial role as innovation's leading resource and implementer (Novi & Etikariena, 2022).
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This requirement is caused by the increasing desire of customers to get fast and efficient service. The current organizational environment is based on digital science and technology, where development is very dynamic, and work activities tend to involve complex, non-standard, and non-routine tasks (Sukma et al., 2019). Therefore, employees in companies need to develop themselves, support, and implement new methods, approaches, or procedures involving technology to overcome challenges in their work environment. (Van Minh et al., 2017).

Organizations must seek, master, and apply new technologies, implement new ways to achieve goals, implement new work methods, and investigate and develop resources to implement new ideas (Pranogyo, 2017). In addition, effective management must focus on employee performance processes to ensure adequate employee output (Armstrong & Taylor, 2023). One of the aims of using technology in tasks is to improve employee performance, ensure ease in minimizing errors, provide fast access to information, and enable employees to provide quality services. (Latip et al., 2022).

This research seeks to conduct a study that can find the causes of the sub-optimal performance of the Iskandar Muda Pupuk Company through a Human Resources aspect approach. A quantitative method has been prepared to analyze primary data, and it is hoped that the results of this research can provide solutions to the problems experienced.

II. THEORETICAL REVIEW.
Creative self-efficacy is an individual's belief that they can produce creative ideas. It is a specific type of self-efficacy related to creativity that functions as motivation and cognitive function (Farmer & Tierney, 2017). Creative self-efficacy will influence performance because it reflects the internal supporting forces that encourage individuals to persist in facing challenges in creative work (Tierney & Farmer, 2000). According to (Reeves & Chiang, 2019), creative self-efficacy describes creative self-confidence associated with work performance better through a motivational orientation approach, which refers to a person's goal setting to pursue positive outcomes at work actively. Research finds creative self-efficacy influences innovative work behavior (Afasar & Masood, 2018).

Researchers argue that individuals engage in creative behavior to exploit their cognitive resources (Taylor & Greve, 2006). Opinion-based indicators measure creative self-efficacy (Tierney & Farmer, 2000): Ability to solve problems, Ability to generate new ideas, Talent in developing other people's ideas, Ability to overcome difficult problems, and Ability to overcome problems.

Innovative work behavior consists of several interconnected activities: problem recognition, idea creation, idea promotion, and idea realization. This activity can increase employees' Ability to innovate and perform well (de Jong & den Hartog, 2010). Empirically, several studies have examined the positive relationship between innovative behavior and performance (Dörner et al., 2012; Yuan & Woodman, 2010; Farzaneh & Boyer 2019). Other research conducted by (Chan and Rasli, 2014) found support for innovative work behavior as a factor influencing employee performance. Innovative work behavior is measured using four sets of interrelated behavioral activities developed by (de Jong and den Hartog, 2010), namely problem recognition, idea generation, idea promotion, and idea realization.

Empirical studies tend to support the idea that creative self-efficacy has a more significant impact on creative work behavior than the impact of self-efficacy on work performance, as research results (Santoso, Elidjen, et al., 2019) prove that there is a positive and significant relationship between creative self-efficacy and innovative work behavior, innovative work behavior is positively related to performance. Performance is measured using six indicators from Gomes (2003): Quantity of work, Quality of work, Job knowledge, Punctuality, Cooperation, and Initiative.

Digital literacy significantly influences the relationship between innovative work behavior and performance. Digital literacy, according to (Martin, 2005), is an individual's awareness, attitude, and Ability to use literacy tools and facilities appropriately to identify, access, manage, integrate, evaluate, analyze, and synthesize digital resources, build new knowledge, create media expressions, and communicate with others in the context of specific life situations, enabling constructive social action. Digital literacy is measured by six indicators developed by the International Society for Technology in Education: Creativity and Innovation, Communication and Collaboration, Research and Information Fluency, Critical Thinking, Problem Solving and Decision Making, Literacy Citizenship, Technology Operations, and Concepts.

III. CONCEPTUAL FRAMEWORK AND HYPOTHESIS
Several previous studies have examined the influence of creative self-efficacy on innovative work behavior, for example, research (Hsiao et al., 2011); the study results show a robust positive relationship between employee self-efficacy and innovative work behavior. Furthermore, research (Momeni et al., 2014) shows a positive influence of self-efficacy on innovative work behavior. Another research (Newman et al., 2018) found that it can encourage innovative behavior among employees with higher levels of creative self-efficacy to participate in decision-making.

Research (Gong et al., 2009) examines the relationship between employee creativity and job performance. The research results found that employee creativity was positively related to employee performance. Research (Abdullah et al., 2019) found that Creative Self Efficacy (CSE) was a significant predictor of performance.
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Other research results show a lack of differences in innovative work behavior based on gender and education. However, employees employed in a cross-functional capacity and dealing with customer-related environments tend to exhibit high performance compared to research and development divisions. Furthermore, research (Bledow et al., 2009; Hülsheger et al., 2009; Dörner, 2012) found that innovative work behavior was positively related to their performance. Then research (Janssen et al., 2020) concluded that innovative work behavior influences employee performance and organizational effectiveness, so this research proves that innovative work behavior can fully mediate the relationship between performance self-efficacy and employee performance.

Then, research (Li.M et al., 2017), research that examines the influence of proactive personality (innovative work behavior) on the profession and investigates the mediating effect of innovative work behavior on the relationship between creative self-efficacy and performance and the research results show that creative self-efficacy is significantly positively related to innovative work behavior. Furthermore, mediation analysis revealed that creative self-efficacy was fully mediated by innovative work behavior in achieving performance.

Research (Santoso et al., 2019) to determine the relationship between innovative work behavior, performance, and digital literacy (as a moderator of the relationship between innovative work behavior and performance). This research seeks to prove that technology innovation can function as a core element to encourage company competitiveness, especially in high-tech industries. The role of innovation is becoming increasingly significant and can determine the survival and growth of a company. The research found that digital literacy significantly moderated the relationship between innovative work behavior and employee performance.

Based on the theoretical basis and research conceptual framework, the following hypothesis can be formulated: H1: Creative Self-Efficacy has a significant effect on Employee Innovative Work; H2: Creative Self-Efficacy has a significant effect on Employee Performance; H3: Innovative Work Behavior has a significant effect on Employee Performance; H4: Innovative Work Behavior mediates the influence of Creative Self-Efficacy on Employee Performance; H5: Digital Literacy moderates the influence of Creative Self-Efficacy on Employee Performance.

IV. RESEARCH METHODOLOGY

This research was conducted at PT Pupuk Iskandar Muda Aceh Utara, and the research subjects were the Company's employees, with a total sample of 120 employees. Meanwhile, the data analysis method used is a quantitative analysis using the SEM-PLS (Structural et al.) model with the SMART-PLS program (Ghozali, 2016). There are two stages in analyzing SEM-PLS: Measurement Model Analysis (Outer Model) and Structural Model Analysis (Inner Model). The measurement model analysis (Outer Model) aims to evaluate the constructed variable being studied, namely the validity and reliability of a variable, including Internal consistency and convergent Validity (Average Variance). Extracted / AVE); and Discriminant Validity. Meanwhile, Structural Model Analysis (Inner Model) Structural Model Analysis aims to test the research hypothesis. There are at least two parts that need to be analyzed in this structural model, including Collinearity/Variance Inflation Factor/VIF); Testing the significance of the structural model path coefficient; and R-Square (Hair et al., 2006).

V. RESEARCH RESULTS AND DISCUSSION

Outer Model

The outer model test results shown in Figure 1 showed that all outer loading values were more significant than 0.70 except KK6 and KK12, which had outer loading values below 0.70. Thus, these two items were no longer used in the following analysis.

Figure 1: Outer Loading Model Test Results
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Structural Model (Inner Model)
Structural Model Analysis (inner model) aims to test the research hypothesis. There are three parts analyzed in this structural model, namely: (1) Collinearity (Collinearity/Variance Inflation Factor/VIF), (2) Testing the significance of the structural model path coefficient (Structural Model Path Coefficient), (3) Determination Coefficient (R-Square).
Collinearity (Collinearity/ Variance Inflation Factor/VIF). Collinearity testing to prove whether the correlation between latent variables/constructs is strong. The results of calculating the VIF inner model value show that self-efficacy is 9.234, digital literacy is 8.674, and innovative work behavior is 6.506, which means that it can be explained that all inner VIF values of the correlation between exogenous and endogenous variables are <10. Thus, all variables in this study are free from multicollinearity.

Sub-structural 1 (Testing Direct Influence and Indirect Influence)
Sub-structural one aims to determine the direct influence of Creative Self-Efficacy (CSE) on Innovative Work Behavior (IWB) and Employee Performance (KK) and the direct influence of IWB on Employee Performance. This sub-structural equation 1 also aims to determine the indirect influence of Creative Self-Efficacy on Employee Performance through the mediating role of the Innovative Work Behavior (IWB) variable. The results of the inner analysis of the Sub-structural equation 1 model are displayed in Figure 2.

![Figure 2 Inner Sub Structure Model 1](image)

Based on the data displayed in Figure 2, it is then summarized in Table 2

| Variabel Relationship | Original Sample (O) | T Statistics (|O/STDEV|) | P Values |
|------------------------|---------------------|-----------------------------|----------|
| **Direct Effect**      |                     |                             |          |
| creative self-efficacy -> innovative work behavior | 0.897 | 44.880 | 0.000 |
| creative self-efficacy -> employee performance | 0.697 | 10.072 | 0.000 |
| digital literacy -> employee performance | 0.142 | 1.542 | 0.124 |
| innovative work behavior -> employee performance | 0.167 | 3.029 | 0.003 |
| **Indirect Effect**    |                     |                             |          |
| creative self-efficacy -> innovative work behavior -> employee performance | 0.150 | 2.992 | 0.003 |
| **Total Effects**      |                     |                             |          |
| creative self-efficacy -> innovative work behavior | 0.897 | 44.880 | 0.000 |
| creative self-efficacy -> employee performance | 0.846 | 9.735 | 0.000 |
| digital literacy -> employee performance | 0.142 | 1.542 | 0.124 |
| innovative work behavior -> employee performance | 0.167 | 3.029 | 0.003 |

Table 2 Testing the Significance of Sub-Structure Path Coefficient 1 Sub-structural 2 (Testing the Moderating Effect)
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Carry out a regression of Creative Self-Efficacy and Innovative Work Behavior variables on employee performance involving moderating variables (Digital Literacy) and interaction variables (IWB*DL). The regression results are displayed in Figure 3.

![Figure 3 Inner Sub-Structural Model](image)

Based on the regression results in Step 3, the data in Figure 3 is summarized in Table 3:

**Table 3 Inner Regression Results for Sub-Structural Model 3**

<table>
<thead>
<tr>
<th>Variable Relationship</th>
<th>Original Sample (O)</th>
<th>T Statistics (O/STDEV)</th>
<th>P Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>creative self-efficacy -&gt; innovative work behavior</td>
<td>0,897</td>
<td>50,548</td>
<td>0,000</td>
</tr>
<tr>
<td>creative self-efficacy -&gt; employee performance</td>
<td>0,700</td>
<td>10,776</td>
<td>0,000</td>
</tr>
<tr>
<td>digital literation -&gt; employee performance</td>
<td>0,143</td>
<td>1,703</td>
<td>0,045</td>
</tr>
<tr>
<td>innovative work behavior -&gt; employee performance</td>
<td>0,157</td>
<td>2,756</td>
<td>0,003</td>
</tr>
<tr>
<td>Moderating IWB*DL -&gt; employee performance</td>
<td>-0,015</td>
<td>1,050</td>
<td>0,147</td>
</tr>
</tbody>
</table>

**Coefficient of Determination (R-square)**

The results of the data analysis of the R-Square values for all structural models are shown in the R Square and Adjusted R Square values for innovative work behavior of 0.804 and employee performance of 0.973. The R-Square test shows that this research model has excellent model prediction accuracy. These results also show that variations strongly influence the dependent variable's values in the independent variables selected in each research path equation. A high R-square indicates that the independent variable is exact and suitable for explaining the dependent variable in this research model. The R-square value obtained is more than 0.75, which shows that this research model is robust in explaining the influence of the independent variable on the dependent variable.

**The Influence of Creative Self-Efficacy on Employee Innovative Work Behavior**

Based on the results of data analysis, it was found that Creative Self-Efficacy (CSE) had a positive and significant effect on employee Innovative Work Behavior (IWB), with a coefficient value of 0.897 (89.7%) and a significance value of 0.000 or significant at the 1% level. This means that innovative work behavior will also increase if employees' creative self-efficacy increases. Employees with high creative self-efficacy are usually able to solve problems, generate new ideas, have the Talent to develop other people's ideas and overcome and solve complex problems. Employees will also try to realize their ideas while working at the Iskandar Muda Pupuk Company.

The results of this study are the opinion of Reeves and Chiang (2019) that people with high creative self-confidence are sensitive to positive stimuli and tend to adopt the goals of this approach to achieve positive results.

This research supports several previous research results, which found that creative self-efficacy influences Innovative Work Behavior example research (Afsar & Masood, 2018; Hsiao et al., 2011; Momeni et al., 2014).

**The Influence of Creative Self-Efficacy on Performance**

Based on the results of data analysis, it was found that Creative Self-Efficacy (CSE) had a positive and significant effect on employee performance with a coefficient value of 0.697 (69.7%) and a significance value of 0.000 or significant at the 1% level. This means that if employees' creative self-efficacy increases, the performance of the Iskandar Muda Pupuk Company employees
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Innovative work behavior, which impacts employee performance, is significantly moderated by digital literacy. Another research was conducted by Chan & Rasli (2014), which found that digital literacy is an essential factor influencing employee performance. This research results differ from Santoso, Elidjen, et al. (2019), which found that digital literacy did not moderate the influence of digital literacy. Empirically, research by Gong et al. (2009), research results found that employee creativity is positively and significantly related to employee performance. Then, research by Abdullah et al. (2019), the study found that CSE was a significant predictor of performance. Also, research by Jaiswal and Dhar (2015) investigates the mediating role of innovation climate and the moderating role of creative self-efficacy.

The Influence of Innovative Work Behavior on Performance

Based on the results of data analysis, it can be explained that Innovative Work Behavior (IWB) has a positive and significant effect on Employee Performance with a coefficient value of 0.167 (16.7%) and a significance value of 0.003 or significant at the 5% level. This means that if the innovative work behavior of PT PIM Aceh Utara employees increases, employee performance will also increase. This series of activities is according to de Jong & den Hartog, 2010, can increase employees' Ability to innovate and high-performance.

The Influence of Creative Self-Efficacy on Employee Performance through the Mediation of Innovative Work Behavior

Based on the results of data analysis, it can be explained that Innovative Work Behavior (IWB) partially mediates the effect of Creative Self-Efficacy (CSE) on Employee Performance with an indirect path coefficient value of 0.150 (15.0%) and a significance value of 0.003 or significant at the 5% level. This evidence means that the role of IWB is only partially in mediating the influence of CSE on the performance of Pupuk Iskandar Muda Company employees. Without IWB as an intermediary, CSE itself can influence employee performance. However, the influence is only partial, but with the mediating role of IWB, the influence of CSE will reach optimal.

The Effect of Innovative Work Behavior on Performance Through Digital Literacy Moderation

Based on the results of data analysis, it was found that digital literacy did not moderate the influence of innovative work behavior on the performance of Pupuk Iskandar Muda Company employees, where the coefficient value obtained was -0.015 (-1.5%), and the significance value was 0.147 which was much more significant than 0.05. This empirical evidence means that the facilities and systems used by the Company are adequate and constantly updated. Likewise, in terms of employee skills, the Company has routinely carried out training in order to strengthen digital capabilities so that employees can identify, access, manage, integrate, evaluate, analyze, and synthesize digital resources, build new knowledge, create media expressions and communicate with other people, colleagues, and superiors in the context of work-life situations, allowing for more constructive actions and work relationships.

In general, company employees no longer need the moderating role of digital literacy to influence innovative work behavior, which impacts performance because digital literacy is already inherent and increasingly familiar to employees in daily work. This research results differ from Santoso, Elidjen, et al. (2019), which found that digital literacy significantly moderated the relationship between innovative work behavior and employee performance.

VI. RECOMMENDATIONS

Based on the research conclusions as described above, several suggestions can be given as follows:

1. Based on the analysis of statistical descriptions related to the creative self-efficacy variable, it was found that there are still employees who need to be fully able to think systematically in solving the work problems they experience. Therefore, it is
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recommended that company leaders conduct logical and systematic thinking exercises for employees by always suggesting that they write down all work in one place so that it is easy to group (triage) correctly. Second, create a clear timeline. Timeline helps employees monitor time, and thirdly, it helps them do self-introspection and be open to new thoughts that are more conducive.

2. Regarding innovative work behavior, it was found that there were still employees who needed to be able to diagnose the causes of problems in carrying out their work, and employees had also not been able to convince their superiors that their ideas were good. Therefore, it is recommended that superiors guide employees in identifying problems based on appropriate data and information. Next, get employees used to conveying their ideas to their superiors and superiors, respecting the ideas of their subordinates. This is important to grow employee self-confidence.

3. Employees generally have skills in using digital. Therefore, it is hoped that leaders will continuously update digital devices and adapt employees' digital capabilities.

4. Therefore, superiors need to provide enlightenment about the importance of having digital capabilities in the current era. Leaders can also provide digital devices to carry out daily work so that employees are accustomed to digital devices and feel the benefits of using digital devices to communicate and support work implementation.

5. Regarding employee performance, some still need to achieve the total quantity of work output according to the predetermined target. Therefore, to stimulate and create high work morale to achieve performance targets, leaders provide financial and non-financial rewards for employees who succeed in achieving their performance targets.

REFERENCES

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