Innovative work behavior: Role of organizational climate and employee creativity

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For companies, employees play an important role in bringing innovation to life. In improving employees innovative work behavior, researchers formulate factors such as organizational climate and employee creativity. This research uses quantitative techniques, with the object of research being one of the Internet Service Provider companies in Semarang. The sample in this study is 100 respondents who are employees of the company. This research analysis uses the Structural Equation Model approach using path analysis techniques on Smart PLS. The research results show that organizational climate positively and significantly affects innovative work behavior. Employee creativity has a positive and significant effect on innovative work behavior. Organizational climate has a positive and significant effect on employee creativity. Thus, to compete with Internet Service Provider companies, the organizational climate must be maintained, and employee creativity must be increased to create innovative work behavior within the company.

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Keywords
Organizational Climate; Employee Creativity; Innovative Work Behavior.

1. Introduction

Competition between companies is becoming increasingly fierce as technology rapidly develops. To maintain a competitive edge, companies must rapidly adapt to technological advancements and respond promptly to the escalating needs of their customers. Innovation is an important facilitator of business growth (Munir & Beh, 2019). As they are crucial in bringing innovation to life, many businesses support their employees' inventive behavior (Atikariena & Muluk, 2014). Current research on creativity and innovation shows that individual qualities and the work environment trigger innovative work behavior and socialize (Moussa, 2014; Munir & Beh, 2016). Organizational climate has been researched because a conducive work environment influences employee behavior to be productive and grow so that innovation is born (Fainshmidt & Frazier, 2017).
Research has shown that a supportive organizational climate nurtures employee innovation (Awang et al., 2019). Organizational climate is related to the work environment, which is an important factor in supporting the performance of an organization because a conducive work environment indirectly triggers work passion and job satisfaction (Fatmanengsih & Mansyur, 2022). Thus, employees will not hesitate to display their innovative work behavior. A pleasant work climate can stimulate a person's creativity and innovation in such a way that it makes people feel relaxed and able to think, which in turn will produce a greater generation of ideas for development and improvement (Nasurdin et al., 2014). Following this view, employees engage in innovative work behavior when a company's organizational climate is perceived as high.

Apart from creating a good organizational climate, an important factor in increasing innovative work behavior is every employee's participation in creative contribution. This is because talented and creative employees contribute to developing new ideas, designing products or services, and offering solutions that can become a competitive advantage for business competitors (Munir & Beh, 2019). Amabile (2018) defined creativity as producing new and useful ideas in any field and stated that individual innovation begins with generating ideas. Creativity requires curiosity and imagination in order to gain new knowledge, generate ideas, and innovate. Applying creative ideas from employees increases productivity in the company, thereby creating innovative work behavior. In other words, work ideas practically implement employee creativity (Widmann et al., 2016).

This study was conducted at a telecommunications company. Telecommunication technology and innovation are important factors that support sustainable survival because they play a role and function as necessary modern infrastructure (Maneejuk & Yamaka, 2020). Various companies worldwide apply innovative behavior to their employees, such as Hubspot and 37 signal companies. Both companies operate in the technology sector, especially software. HubSpot has a special system to motivate employees to show better performance, where they are stimulated to come up with ideas, present them, and develop them into a project within a certain time. The 37 signals company also allows employees to develop new ideas both individually and as a team.

This research was conducted at the Internet Service Provider (ISP) company in Semarang. ISP is always required to provide fast and stable Internet services to accommodate user demand, which is increasing daily. However, only some Internet companies can stand alone by relying on only one product. Without playing an innovative role, ISP companies can lag behind their competitors. According to Spanuth and Wald (2017), the latest technological developments provide power for companies to create creativity and innovation to meet customer needs and expectations. This opinion follows the results of Santoso et al. (2019), who state that the perspective of employees within a company has a positive effect on innovative work behavior in the telecommunications industry. Therefore, employees in this company require development, which can be achieved by providing support and implementing innovative methods through fresh approaches or processes (Van Minh et al., 2007) to create innovative work behavior. A supportive organizational climate has led employees at ISP companies to innovate by collaborating with digital products to complement the needs of their consumers. After 16 years as an Internet service provider, this company officially released new products such as Artificial Intelligence (AI), Internet of Things (IoT), Software & Applications, Websites, and Cloud Computing. A company's strategy to convince consumers to use its products is to provide information technology consulting services. Businesses with a strong organizational innovation culture and high employee creativity scores are better positioned to compete in today's competitive business world.

This study aimed to determine the relationship between employee creativity, company culture, and innovative work practices. Munir and Beh (2019) showed how a creative work environment in a company has a positive effect on imaginative work behavior. The results of
studies by Wardhani and Gulo (2017) and Mahardika and Syarifah (2021), however, show that while organizational climate is helpful, it is insufficient to explain innovative work behavior. Tri et al. (2019) and Ijaz and Nawaz (2022) demonstrate that inventive work practices and employee creativity are positively correlated. This finding contrasts with that of Susrini et al. (2019) who found that while employee creativity contributes to innovative work behavior, it is not a significant factor. Additionally, Le et al. (2021) demonstrated that employee creativity has a negligible negative impact on innovative work behavior. Although there is a strong theoretical correlation between organizational climate, employee creativity, and innovative work behavior, more research is still required to empirically validate the factors that have been found to influence innovative work behavior in earlier studies (Anderson et al., 2014; Volery & Tarabashkina, 2021). Therefore, this research aims to provide validation and empirical evidence of the relationship between organizational climate and employee creativity in shaping innovative work behavior.

2. Literature Review and Hypothesis Development

2.1 Literature Review

2.1.1. Organizational Climate
Creating a work environment that fosters creativity, growth, productivity, and organizational success is intimately linked to the organizational climate (Fainshmidt & Frazier, 2017). The opinions and attitudes of organizational members regarding work relationships, managerial practices, procedures, and other aspects of the organization are referred to as the organizational climate (Tokarski & Oleksa-Marewska, 2019). Consequently, member behavior and organizational effectiveness, particularly creative work behavior (Ghasemi & Keshavarzi, 2014), are determined by organizational atmosphere (Sokol et al., 2015).

2.1.2. Employee Creativity
Creativity is related to generating new ideas that are useful for improving performance. Employee creativity is an important behavior that refers to employees' ability to generate new ideas and provide solutions to problems that are appropriate, useful, and aligned with objectives (Oldham & Cummings, 2017). Employee creativity is often referred to as the forerunner to the birth of innovation because this has implications for special cognitive processes that encourage idea creation (Anderson et al., 2014). Employees who show more significant characteristics of increasing individual creativity will usually have higher levels of creative ability. So, in the end, the organization will secure, retain, and manage highly creative employees more strategically than employees with low creative abilities. This follow Schaufeli (2017) statement that creativity will be a personal resource for employees that is useful in exhibiting innovative work behavior.

2.1.3. Innovative Work Behavior
According to Momeni et al. (2014), innovative work behavior is the purposeful process of creating, presenting, and putting into practice novel and creative ideas within the framework of a task, group, or organization to enhance that group's or organization's performance. Specifically, creative conduct at work is regarded as a necessary precondition for a company's survival (Hon & Lui, 2016; Lee & Hyun, 2016). In the context of a rapidly changing global life, employees' innovative work behavior serves as
a sustainable competitive advantage for organizations, facilitating the company's survival and long-term success (Agarwal, 2014).

2.2. Hypothesis Development

2.2.1. Positive Effect of Organizational Climate toward Innovative Work Behavior

Organizational climate is important in managing human resources, improving human resources, and encouraging innovative work behavior (Al-Shobaki et al., 2018). Organizational climate support from leaders, colleagues, and work environment conditions can increase innovative behavior for employees (Zhu et al., 2023). Previous research has supported the idea that organizational climate is key to developing innovative work behavior (Ren & Zhang, 2015; Balkar, 2015). This finding is strengthened by research results from Susrini et al. (2019) regarding the relationship between organizational climate and innovative work behavior, which shows a positive influence. So, the more positive an organization and its climate, the better the innovation.

H1: Organizational Climate Has a Positive Effect on Innovative Work Behavior

2.2.2. Positive Effect of Employee Creativity toward Innovative Work Behavior

Innovative work ideas are a practical implementation of creativity created by employees (Widmann et al., 2016). Based on research conducted by Karatepe et al. (2020) shows that a climate of creativity leads to innovative behavior. Al Mazrouei et al. (2023) found that innovative work behavior was driven by employee creativity. Creativity is confirmed as an important factor related to innovation due to implementing innovative work behavior ideas (Amabile & Pratt, 2016).

H2: Employee Creativity Has a Positive Effect on Innovative Work Behavior

2.2.3. Positive Effect of Organizational Climate on Employee Creativity

Employees who perceive their workplace as a creative hub and see themselves in creative positions are likelier to display enhanced creative actions (Zhang et al., 2020). Previous research conducted by Susrini et al. (2019) and Mutonyi et al. (2020) stated that organizational climate positively affected creativity. Even though the enthusiasm to be creative is very important, situational factors and the organization's climate are equally important (van Knippenberg & Hirst, 2015). By creating a comfortable organizational climate for employees and establishing good communication, employees will more easily explore bright ideas that encourage creative behavior.

H3: Organizational Climate Has a Positive Effect on Employee Creativity

2.3. Research Framework

The aforementioned hypotheses are demonstrated in this study framework. This study suggests that organizational atmosphere affects creative work behavior, as illustrated
in Figure 1. According to this study, inventive work behavior is directly influenced by employee inventiveness. Furthermore, this study suggests that employee creativity is directly influenced by corporate climate.

3. Research Method

This research adopts a quantitative method to test the relationship between variables (Creswell, 2012). Data was collected using the probability sampling method using simple random sampling techniques (Rahi, 2017). The indicators in this research use a five point from Likert scale (Likert, 1932). Questionnaire items were adapted from previous research. Organizational climate (OC) was measured using 12 items from research by Scott and Bruce (1994). Employee creativity (EC) was measured using five items from research by Karwowski (2012). De Jong and Den Hartog's (2010) research yielded ten questions that were used to measure innovative work behavior (IWB). The participants in this study were staff members of an ISP located in Semarang. Google Forms was used to disseminate the survey. The survey included 100 participants. Smart PLS was used to analyze the data to assess the hypotheses, validity, and reliability. Path analysis approaches were used with a Structural Equation Model (SEM) approach for the analysis.

4. Results and Discussion

4.1. Validity and Reliability Test

In order to guarantee the reliability and validity of the questionnaire items, this study evaluates measuring techniques at different stages. The factor loading value influences the validity test with a limit of greater than 0.7 (Hair et al., 2019). Indicator with loading factor below 0.7 are considered unacceptable, and they recommend rejecting items containing values below the recommended value of 0.7. Then for the assessment of reliability tests seen based on the value of Cronbach's alpha and composite reliability. Both must be above 0.6 and also 0.7 for the research variable to be reliable (Hair et al., 2019).

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Organizational Climate</th>
<th>Employee Creativity</th>
<th>Innovative Work Behavior</th>
</tr>
</thead>
<tbody>
<tr>
<td>OC 1</td>
<td>0.735</td>
<td></td>
<td></td>
</tr>
<tr>
<td>OC 2</td>
<td>0.749</td>
<td></td>
<td></td>
</tr>
<tr>
<td>OC 3</td>
<td>0.724</td>
<td></td>
<td></td>
</tr>
<tr>
<td>OC 4</td>
<td>0.714</td>
<td></td>
<td></td>
</tr>
<tr>
<td>OC 5</td>
<td>0.737</td>
<td></td>
<td></td>
</tr>
<tr>
<td>OC 6</td>
<td>0.798</td>
<td></td>
<td></td>
</tr>
<tr>
<td>OC 12</td>
<td>0.774</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EC 1</td>
<td></td>
<td>0.821</td>
<td></td>
</tr>
<tr>
<td>EC 2</td>
<td></td>
<td>0.892</td>
<td></td>
</tr>
<tr>
<td>EC 3</td>
<td></td>
<td>0.900</td>
<td></td>
</tr>
<tr>
<td>EC 4</td>
<td></td>
<td>0.884</td>
<td></td>
</tr>
<tr>
<td>EC 5</td>
<td></td>
<td>0.733</td>
<td></td>
</tr>
<tr>
<td>IWB 2</td>
<td></td>
<td>0.725</td>
<td></td>
</tr>
<tr>
<td>IWB 3</td>
<td></td>
<td>0.756</td>
<td></td>
</tr>
<tr>
<td>IWB 4</td>
<td></td>
<td>0.782</td>
<td></td>
</tr>
<tr>
<td>IWB 5</td>
<td></td>
<td>0.838</td>
<td></td>
</tr>
<tr>
<td>IWB 6</td>
<td></td>
<td>0.877</td>
<td></td>
</tr>
<tr>
<td>IWB 7</td>
<td></td>
<td>0.783</td>
<td></td>
</tr>
<tr>
<td>IWB 8</td>
<td></td>
<td>0.827</td>
<td></td>
</tr>
<tr>
<td>IWB 9</td>
<td></td>
<td>0.738</td>
<td></td>
</tr>
<tr>
<td>IWB 10</td>
<td></td>
<td>0.738</td>
<td></td>
</tr>
</tbody>
</table>

Source: Primary Data Processed (2023)
Table 1 reveals the loading factors were greater than 0.7 for the parameters pertaining to the organizational atmosphere, employee creativity, and creative work behavior. Nevertheless, a number of indicators OC 7, OC 8, OC 9, OC 10, OC 11, and IWB 1 must be disregarded because their loading factor values are less than 0.7. Table 2 displays Cronbach’s alpha and composite reliability values for the following variables: employee creativity (0.901 and 0.927), organizational climate (0.870 and 0.899), and inventive work behavior (0.922 and 0.936 respectively).

### Table 2. Reliability Test Result

<table>
<thead>
<tr>
<th>Variable</th>
<th>Cronbach’s Alpha</th>
<th>Composite Reliability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organizational Climate</td>
<td>0.870</td>
<td>0.899</td>
</tr>
<tr>
<td>Employee Creativity</td>
<td>0.901</td>
<td>0.927</td>
</tr>
<tr>
<td>Innovative Work Behavior</td>
<td>0.922</td>
<td>0.936</td>
</tr>
</tbody>
</table>

Source: Primary Data Processed (2023)

### Table 3. Discriminant Validity Test Result

<table>
<thead>
<tr>
<th>Variable</th>
<th>Employee Creativity</th>
<th>Innovative Work Behavior</th>
<th>Organizational Climate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employee Creativity</td>
<td>0.849</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Innovative Work Behavior</td>
<td>0.762</td>
<td>0.786</td>
<td></td>
</tr>
<tr>
<td>Organizational Climate</td>
<td>0.432</td>
<td>0.536</td>
<td>0.748</td>
</tr>
</tbody>
</table>

Source: Primary Data Processed (2023)

Next is the discriminant validity test, which is useful for evaluating empirical differences between a variable and another variable. In the Fornell-Larcker test, the square root of the Average Variance Extracted (AVE) value must be greater than the correlation between the constructs being studied (Fornell & Larcker, 1981). Table 3 shows that the discriminant validity criteria are approved. So, it was found that all research variables were empirically different.

### Table 4. Goodness of Fit Model

<table>
<thead>
<tr>
<th>Estimated Model</th>
<th>Estimated Model</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standardized Root Mean Square</td>
<td>0.083</td>
</tr>
<tr>
<td>Chi-square</td>
<td>438.103</td>
</tr>
<tr>
<td>Normed Fit Index</td>
<td>0.731</td>
</tr>
</tbody>
</table>

Source: Primary Data Processed (2023)

Hair and Alamer (2022) explains that standardized root mean square values below 0.08 indicate model fit. Table 4 shows that the standardized root mean square model estimation result is 0.083, which means the model has an acceptable fit. Chi-square test is used to test the difference between the theoretical distribution (which is assumed) and the observed distribution. The calculated chi-square value is obtained from statistical calculations based on research data. This value is then compared with the chi-square table at a certain degree of freedom (DF) and significance level. The chi-square table value for DF = 1 at a significance of 5% or 0.05 on the statistical table shows a value of 3.841. The calculated chi-square value of 438.103 > chi-square table value of 3.841 means the hypothesis is accepted. So, there is a statistically significant result among the observed variables. The normed fit index value is between 0 and 1; the closer it is to 1, the better the model is being built. The estimated result of the normed fit index model is 0.731, which means the model fits the data. The validity and reliability test has been completed. It can be
concluded that the construct indicators obtained are valid and reliable so that the data testing process can be continued to the next stage.

4.2. Hypothesis Test

Path analysis is a comprehensive approach to studying direct and indirect relationships between several independent and dependent variables. This approach builds on traditional regression analysis by building models that combine all conditions hypothesized to address temporal "causation". This research was assisted by using Smart PLS. This path analysis uses a three-path structural model, where there will be three structural equations. First, the effect of organizational climate variables on innovative work behavior. Second, the effect of employee creativity on innovative work behavior. Third, the effect of organizational climate on employee creativity. From the results of the analysis using Smart PLS, the path analysis form is obtained in Figure 2.

![Figure 2. Measurement Model](image)

From this equation, it can be seen that the structural path coefficient of the employee creativity variable on innovative work behavior has the greatest value compared to the structural path coefficient of the organizational climate variable on innovative work behavior and organizational climate variables on employee creativity variables, which means that it indicates that the role of employee creativity tends to have the greatest influence on the occurrence of innovative work behavior.

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Original Sample</th>
<th>Sample Mean</th>
<th>Standard Deviation</th>
<th>T Statistic</th>
<th>P Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organizational Climate → Innovative Work Behavior</td>
<td>0.244</td>
<td>0.248</td>
<td>0.059</td>
<td>4.119</td>
<td>0.000</td>
</tr>
<tr>
<td>Employee Creativity → Innovative Work Behavior</td>
<td>0.657</td>
<td>0.653</td>
<td>0.051</td>
<td>12.998</td>
<td>0.000</td>
</tr>
<tr>
<td>Organizational Climate → Employee Creativity</td>
<td>0.442</td>
<td>0.458</td>
<td>0.085</td>
<td>5.212</td>
<td>0.000</td>
</tr>
</tbody>
</table>

Source: Primary Data Processed (2023)

Based on Table 5, we can see the direct influence of each variable. The first hypothesis concerning the impact of organizational climate on innovative work behavior demonstrates a favorable influence, as demonstrated by a p value of 0.000, which is less than 0.05, and a positive value of 0.244 from the original sample. According to the second hypothesis, employee creativity has a positive impact on innovative work behavior. This is supported by a positive value of 0.657 for the original sample and a p value of 0.000, which is less than
0.05. The original sample yielded a positive value of 0.442 for the third hypothesis on the influence of organizational climate on employee creativity, and a p value of 0.000, which is less than 0.05, supports this finding.

4.3. Discussion

4.3.1. The Effect of Organizational Climate on Innovative Work Behavior

The findings of this study suggest that a creative work environment is positively correlated with the organizational climate. Positive workplace environments, like those that are safe, transparent, and participatory, encourage employees to act creatively (Hammond et al., 2011; Sofiatun & Mansyur, 2021). Good organizational cultures encourage people to act creatively because they provide them a sense of intrinsic motivation and complete support from the company, which encourages them to act creatively without hesitation (Shalley et al., 2004). Organizational climate support, such as support from leaders and colleagues, working environmental conditions, and other resources, can increase innovation (Zhu et al. 2023). This shows that the better the organizational climate created, the more innovative work behavior carried out by employees will increase. This result is reinforced by the findings of Önhon (2019), who revealed that an organization's positive innovative climate has a positive influence on innovative work behavior. The same finding was also obtained by Volery and Tarabashkina (2021), who stated that organizational climate has a significant relationship with innovative work behavior.

4.3.2. The Effect of Employee Creativity on Innovative Work Behavior

Based on the research results, employee creativity has a positive effect on innovative work behavior. Employee creativity is important in helping companies adapt to changes and challenges. This can also increase productivity and effectiveness at work. Creativity refers to the ability to create something new, where the thing created does not have to be completely new but can also be a combination of previously existing elements (Ali & Asrori, 2018). Creative behavior from employees allows organizations to bring innovation within the organization, as well as adapt and develop innovation according to market needs. Creative behavior allows employees to play an active role in bringing change to the organization (Gong et al., 2009). This result aligns with the research conducted by Volery and Tarabashkina (2021), which states that employee creativity influences innovative work behavior but with different strengths and is more influential in samples in China. The same finding was also obtained by Ijaz and Nawaz (2022), who stated that there is a positive relationship between employee creativity and innovative work behavior.

4.3.3. The Effect of Organizational Climate on Employee Creativity

Based on the research results, the organizational climate positively affects employee creativity. Organizational climate reflects the quality of the organizational environment and influences how employees work. When the organizational climate continues and develops, it can provide positive support for employees in creating creativity. Dul and Ceylan (2014) explain that the work environment can produce creativity in completing tasks so that employees can produce positive value for the organization. This indicates that a better organizational climate increases employee creativity. The results of this study align with those of Khattak et al. (2017), who state that an organizational climate consisting of intrinsic recognition, support impartiality, and cohesion is positively related to employee creativity. Mutonyi et al. (2020) also found that organizational climate shows a positive relationship to creative performance.
5. Conclusion

Organizational climate positively influences innovative work behavior, employee creativity positively influences innovative work behavior, and organizational climate positively influences employee creativity based on the study and discussion in the preceding chapter. Overall, the researchers concluded that the better the organizational climate created within the company and the higher the level of creativity of employees, the more innovative work behavior will be created. Referring to the conclusions of this study, the author provides several suggestions for parties related to this research, including that companies should maintain a positive organizational climate. Good organizational relationships and climate increase employee loyalty to the company and minimize gaps between employees. Companies should maintain creative employees and provide adequate infrastructure to support creativity. If creativity is created consistently, innovative work behavior will be created, ultimately improving the company's quality. Considering the limited topics in this research, which only discuss organizational climate, employee creativity, and innovative work behavior with a small sample size, the researcher hopes that further research can be carried out in various organizations with a larger sample size and the latest research methods. In addition, researchers hope that further research will discuss the influence of work motivation and job satisfaction on employee performance in information technology company (Riyanto et al., 2021). It also suggests further research topics related to the influence of corporate social responsibility, intention to pursue work, and quality of work life on employee performance in controversial industries in Indonesia (Tarigan et al., 2020).

References


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