Leadership For Innovation In Digital Era: A Study Of How Transformational And Transactional Leadership Styles Impact To Employee Creativity

Kepemimpinan Untuk Inovasi Di Era Digital: Sebuah Studi Bagaimana Gaya Kepemimpinan Transformasional Dan Transaksional Berdampak Terhadap Kreativitas Karyawan

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ABSTRACT

This research delves into the critical role of leadership in stimulating employee creativity within organizations, focusing on the contrasting impacts of transactional and transformational leadership styles. Employing a quantitative approach, data was gathered through the distribution of questionnaires, with a sample size of 300 respondents. Utilizing SmartPLS for analysis, findings revealed that transactional leadership holds a stronger influence compared to transformational leadership on employee creativity. Through the validation of formulated hypotheses, it was concluded that both leadership styles significantly affect employee creativity. By combining the visionary inspiration characteristic of transformational leadership with the structured support inherent in transactional leadership, organizations can cultivate a balanced leadership ethos conducive to fostering employee creativity. Such a culture not only nurtures innovation but also enhances organizational competitiveness over the long term, positioning them for sustained growth and success in dynamic market landscapes.

Keyword: Transformational Leadership, Transactional Leadership, Employee Creativity

1. Introduction

In the contemporary landscape of escalating digitization and globalization, organizations are facing unprecedented challenges in structuring themselves to thrive in the global marketplace (Nambisan & Luo, 2022). One of the foremost challenges revolves around optimizing the structure of work to elicit the most innovative outcomes from employees (Ciccone, 2022; Patra & Dash, 2023). While existing literature emphasizes the importance of equipping the future workforce with digital skills and mindsets, scant attention has been paid to another critical human skill and competency essential for organizational success in the digital age. Employee creativity stands out as a crucial asset for organizations. Recognized by scholars such as Muriungi (2023) and (Khan, 2024), creativity among employees not only fuels innovation but also enables organizations to adapt to ever-changing customer demands. Particularly in industries facing intense competition and societal pressures, fostering dedicated radical innovation capabilities becomes imperative (Urbinati et al., 2022). However, achieving this requires collaborative efforts among various stakeholders to design effective strategies for organizational innovation. The relationship between innovation and creativity underlines the importance of marked creativity as a cornerstone of organizational success(Singh & Phoolka, 2024).

Leadership within an organization plays a pivotal role in fostering creativity among its members (Kozioł-Nadolna, 2020). By setting the tone and culture, leaders can emphasize the value of creativity and innovation, thereby encouraging risk-taking and experimentation among employees. Providing resources and support for creative endeavors further nurtures a conducive environment for innovation. Additionally, involving employees in decision-making processes and fostering collaboration can expose individuals to diverse perspectives, stimulating creativity (Thornhill-Miller et al., 2023). Recognizing and rewarding creative contributions reinforces a culture of innovation within the organization, driving sustained success in the digital era (Cai et al., 2020).

Previous research has consistently demonstrated the significant impact of leadership styles on creativity within organizations. Ethical leadership, characterized by high moral standards and transparent communication, has been found to positively correlate with creativity, fostering an environment of trust and empowerment for innovative ideas (Arokiasamy & Moslehpour, 2021; Zhao et al., 2020). Conversely, authoritative leadership styles, marked by hierarchical control, show a negative association with creativity, often stifling expression and hindering the exploration of new concepts (Costa et al., 2023; Mehraein, 2022; Nasra & Nanda, 2023). Effective leadership that prioritizes ethical behavior not only inspires trust but also cultivates a sense of community among team members, encouraging collaboration and diverse perspectives essential for driving creativity and innovation within the organization (Gathenya, 2022). Transformational and transactional leadership are types of leadership that can influence employee creativity (Alrowwad et al., 2020; Koh et al., 2019; Lee et al., 2020; Shafi et al., 2020). Transformational leadership fuels employee creativity by inspiring a shared vision and encouraging innovation. Leaders stimulate creative thinking by challenging assumptions and fostering a culture of experimentation. Conversely, transactional leadership, reliant on rigid structures and performance-based rewards, may hinder creativity by emphasizing adherence to existing protocols rather than fostering innovation. This approach's focus on maintaining order could restrict employees' willingness to explore new ideas and take risks.

The objective of this research is to explore and understand the role of transactional and transformational leadership in shaping employee creativity, with a focus on their impact on organizational growth and competitiveness. By comparing both types of leadership, this study aims to identify which is more effective in eliciting and stimulating creativity among team members, as well as providing insights to assist organizations in making strategic decisions regarding investment in employee development.

2. Literature Review
Transformational Leadership

Transformational Leadership emphasizes individual caring behaviors that motivate followers to share ideas and contribute to decision-making (Suifan et al., 2018). A review of past research on transformational leadership reveals a rich landscape of scholarly inquiry into its conceptual underpinnings and practical implications. Drawing from seminal works by Nuel et al. (2021) and (Usman, 2020), transformational leadership has been defined by its ability to inspire and motivate followers towards achieving shared organizational goals through charismatic and visionary leadership behaviors. Subsequent empirical studies, such as those by (Purwanto, 2022) and (Shafi et al., 2020), have provided empirical support for the positive impact of transformational leadership on employee outcomes, including creativity and performance. The boundary conditions and contingencies of transformational leadership, shedding light on its effectiveness across different cultural and organizational contexts (Cho et al., 2019). Despite its strengths, critiques have highlighted limitations in the conceptualization

and measurement of transformational leadership, calling for further refinement and validation of the construct (Siangchokyoo et al., 2020).

Transactional Leadership

Recent research on transactional leadership has contributed to a nuanced understanding of its role in organizational contexts (Young et al., 2021). Stemming from foundational works by (Ngatia, 2024) and (Mendoza Solis et al., 2023), transactional leadership has been characterized by its focus on contingent rewards, active management-by-exception, and laissez-faire behaviors. Empirical studies have examined the impact of transactional leadership on employee outcomes, highlighting its effectiveness in maintaining organizational stability and achieving short-term goals through task-oriented approaches (Abdelwahed et al., 2023; Mahfouz et al., 2022). However, research by (Wang et al., 2005) suggests that transactional leadership may have limited effects on fostering employee engagement and long-term organizational success when compared to transformational leadership. Critiques by scholars also raised concerns about the potential for transactional leadership to stifle creativity and intrinsic motivation among followers (Chua et al., 2022). Nonetheless, transactional leadership remains a valuable leadership style in certain contexts, providing a framework for clarifying roles, setting expectations, and ensuring accountability within organizations.

Employee Creativity

Employee creativity has shed light on the multifaceted nature of this construct within organizational settings (Ahmad et al., 2024; Hessari et al., 2023; Lua et al., 2024). Employee creativity refers to the generation of novel and useful ideas, solutions, or innovations by individuals within an organizational context. It encompasses the ability to think divergently, connect seemingly unrelated concepts, and produce original outcomes that contribute to organizational goals and effectiveness (James et al., 2021; Lee et al., 2020)(Lee et al., 2020). Research on employee creativity explores various factors that influence its manifestation, including individual characteristics such as cognitive flexibility (Liu et al., 2020), domain knowledge (Devi, 2024), and personality traits (Zhang et al., 2020), as well as contextual factors such as leadership styles (Cai et al., 2020; Shafi et al., 2020; Singh & Phoolka, 2024), organizational culture (Pan et al., 2020), and work environment (Chen et al., 2021; Volery & Tarabashkina, 2021). Drawing from foundational works by Asif et al. (2022) and Imam et al. (2020) explored various factors influencing employee creativity, including leadership styles. Past researcher has highlighted the importance of organizational culture in promoting psychological safety and providing resources for experimentation and idea generation.
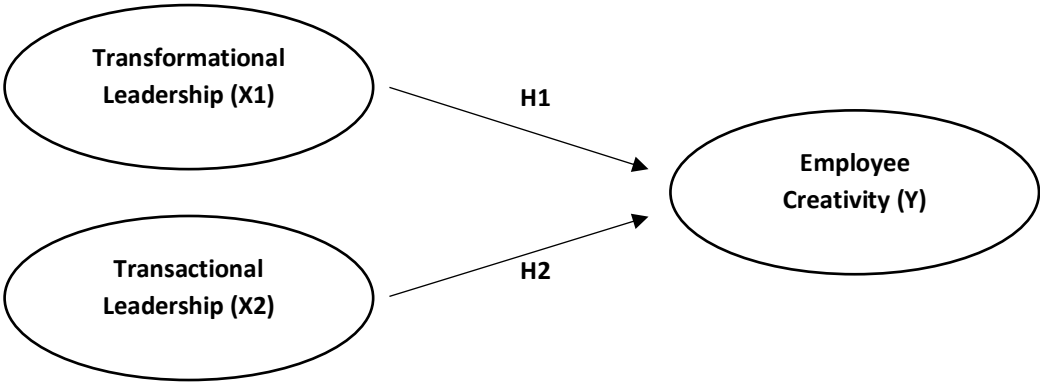
Hypothesis

Figure 1. Research Model

Based on the Figure 1, the hypothesis in this study is as follows
H1   : *Transformational Leadership significantly affects Employee Creativity*
H2   : *Transactional Leadership significantly affects Employee Creativity*

3. Research Methods

This research uses quantitative research. Data was collected by distributing questionnaires to respondents via Google Form. The instruments used to measure Transformational Leadership variables (X1P1-X1P8) and Employee Creativity variables (YP1-YP10) were adapted from research by Suifan et al. (2018). While the Transactional Leadership variable (X2P1-X2P5) was adapted from research conducted by Bass & Riggio (2006). Each statement instrument is given five answer choices, namely: Strongly Agree (SS) score 5, Agree (S) score 4, Neutral (N) score 3, Disagree (TS) score 2, Strongly Disagree (STS) score 1. The data that has been obtained is processed using SmartPLS software version 3.0.

The population in this study are all people who work or are members of the organization, because the number is countless, a sample is taken to represent the population. According to Hair Jr et al. (2021) the minimum number of samples that should be used is 10 times the number of all indicators. This study has 29 measurement instruments so that the minimum sample required is 290 respondents. There were 300 sample respondents who filled out the questionnaire in this study so that the data could be processed because it had met the minimum sample required.

4. Results and Discussions

In this study, data processing was carried out using SmartPLS 3.0, where measurements were carried out by looking at the outer model to test the validity of the instruments used and the inner model to test the hypothesis.

Outer Model
Convergent Validity

Convergent Validity is the correlation between the reflexive indicator score and the latent variable score (Gamal et al., 2023). The convergent validity value is seen from the outer loading on each instrument. According to Hair Jr et al. (2021) the outer loading value above 0.50 is considered sufficient to qualify for convergent validity.
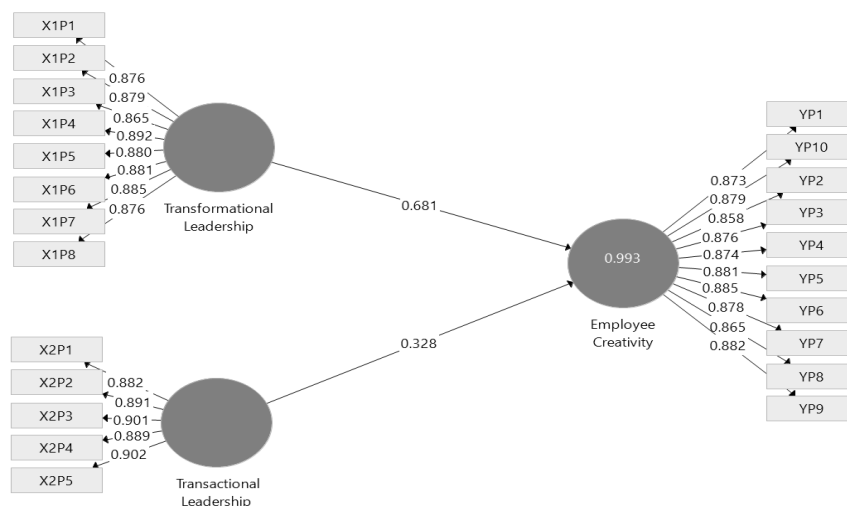

Figure 2. *Convergent Validity*
Source: Data Processing, 2024

Based on Figure 2, the outer loading value on the Transformational Leadership, Transactional Leadership and Employee Creativity variable indicators has a value> 0.5 so that all instruments in this research variable are said to be valid.

Discriminant Validity

Apart from looking at the outer loading value of each indicator, convergent validity is also assessed from the Average Variance Extracted (AVE) value of each construct. According to Hair et al. (2019) an AVE value of at least 0.50 indicates a good measure of validity, meaning that latent variables can explain on average more than half the diversity of their indicators.

Table 1. *Average Variance Extracted* (AVE)

	AVE
Transformational Leadership (X1)	0.773
Transactional Leadership (X2)	0.798
Employee Creativity (Y)	0.766

Source: Data Processing, 2024

Table 1 shows that all variables, namely Transformational Leadership, Transactional Leadership and Employee Creativity, have an AVE value> 0.5, meaning that overall the variables in this study have good validity.

Reliability

According to(Arifin et al. (2023), to ensure that there are no measurement-related problems, the last step in evaluating the outer model is to test the reliability of the model. The reliability test is carried out using the Composite Reliability and Cronbach's Alpha indicators. Composite Reliability and Cronbach's Alpha testing aims to test the reliability of instruments in a research model.

Table 2. Reliability

	Cronbach's Alpha	Composite Reliability
Transformational Leadership (X1)	0.958	0.965
Transactional Leadership (X2)	0.937	0.952
Employee Creativity (Y)	0.966	0.970

Source: Data Processing, 2024

Based on table 2, the Transformational Leadership, Transactional Leadership and Employee Creativity variables have Cronbach's Alpha and Composite Reliability values ≥ 0.70, meaning that the questionnaire used as a tool in this study is reliable.

Inner Model
R-Square

R-Square (R2) is a measure of the proportion of variation in the value of the Employee Creativity variable that can be explained by the variables that influence it, namely Transformational Leadership and Transactional Leadership. According to (Hair Jr et al., 2021) R2 = 0.75 means substantial (large / strong), R2 = 0.50 means moderate (medium) and R2 = 0.25 means weak (small).

Table 3. R-Square

	R-Square
Employee Creativity (Y)	0.993

Source: Data Processing, 2024

Based on table 3, R2 on Employee Creativity (Y) is 0.993, which means that the Employee Creativity (Y) variable can be explained by the Transformational Leadership (X1) and Transactional Leadership (X2) variables by 99.3%, while the remaining amount is explained by other variables not discussed in this study.

Path Coefficient

Hypothesis testing is seen from the value of path coefficients. A measuring tool used to see how much influence one variable has on another. This can be seen through the level of significance. The value of path coefficients ranges between 1 and -1, the closer to 1 or -1 the stronger the relationship (Ghozali & Latan, 2015). According to Hair Jr et al. (2021), for a significance level of 5% the p values must be smaller than 0.05.

Table 4. Path Coefficients

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T-Statistics (O|STDEV|)	P Values
Transformational Leadership (X1) -> Employee Creativity (Y)	0.328	0.328	0.016	20.960	0.000
Transactional Leadership (X2) -> Employee Creativity (Y)	0.681	0.680	0.016	43.861	0.000

Resource: Data Processing, 2024

Based on table 4, the original sample (O) and p values show the influence between the research variables. Although both have an influence on Employee Creativity, Transactional Leadership has a stronger influence of 0.681 than Transformational Leadership of 0.328. Based on the hypotheses that have been formulated, it can be concluded that Transformational Leadership has a significant effect on Employee Creativity and Transactional Leadership has a significant effect on Employee Creativity. This means that H1 and H2 are accepted.

The findings of the study reveal that Transformational Leadership significantly impacts Employee Creativity. Transformational leaders inspire and motivate employees through their visionary outlook, encouragement of innovation, and emphasis on individual growth and development. By fostering a culture of creativity and challenging the status quo, Transformational Leadership plays a crucial role in cultivating an environment where employees feel empowered to generate and implement novel ideas (Al Harbi et al., 2019). This suggests that organizations seeking to enhance creativity may benefit from cultivating Transformational Leadership qualities among their leadership teams, as these qualities can stimulate innovation and contribu

On the other hand, Transactional Leadership emerges as a more influential factor, with a coefficient of 0.681, in driving Employee Creativity. Transactional leaders focus on establishing clear goals, providing structure, and offering rewards or incentives for performance. Within the context of the study, this structured approach appears particularly effective in motivating employees to engage in creative endeavors. By setting clear expectations and offering tangible rewards for creative achievements, Transactional

Leadership creates a framework within which employees are encouraged to explore new ideas and approaches while ensuring accountability and efficiency (Abdelwahed et al., 2023). Consequently, organizations aiming to foster creativity may also benefit from incorporating Transactional Leadership practices, alongside Transformational approaches, to provide a balanced leadership environment that optimally supports creative endeavors.te to long-term organizational success.

5. Conclusion

The study highlights the significant impact of both Transformational and Transactional Leadership styles on Employee Creativity. While Transformational Leadership inspires innovation through visionary leadership and individual empowerment, Transactional Leadership's structured approach provides clarity and incentives for creative efforts. Organizations aspiring to enhance creativity should consider integrating elements of both leadership styles to create a balanced leadership environment. By fostering a culture that combines the visionary inspiration of Transformational Leadership with the structured support of Transactional Leadership, organizations can effectively nurture creativity among their employees, leading to sustained innovation and competitive advantage in the long term.

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