

THE IMPACT OF CREATIVE LEADERSHIP ON STRATEGIC AGILITY IN STARTUPS: MEDIATING ROLES OF RESOURCE MANAGEMENT AND INNOVATIVE WORK BEHAVIOR

Robertus Adi Nugroho¹, Bernardus Aris Ferdinan, Jessica Angelia Rosyadi

Management Department, Faculty of Economics, Darma Cendika Catholic University
Jl. Dr. H. Ir. Soekarno 201, Surabaya 60117, Indonesia

Article history:

Received
1 March 2024

Revised
16 May 2024

Accepted
29 April 2024

Available online
12 August 2024

This is an open access article under the CC BY license (<https://creativecommons.org/licenses/by/4.0/>)



Abstract

Background: Startups in Jakarta face significant challenges in adapting rapidly to a dynamic and competitive business environment. Understanding the role of Creative Leadership (CL) in fostering Strategic Agility (SA) is crucial for addressing these challenges.

Purpose: This study aims to analyze the impact of Creative Leadership on Strategic Agility within Jakarta startups, with Innovative Work Behavior (IWB) and Creative Resource Management (CRM) acting as mediating variables.

Design/Methodology/Approach: A total of 219 mid- to senior-level managers from various startups in Jakarta participated as respondents. The study utilized Smart PLS 4 as an analytical tool to examine the relationships among Creative Leadership, IWB, CRM, and Strategic Agility.

Finding/Result: The findings revealed that Creative Leadership had a positive and significant impact on both Innovative Work Behavior (IWB) and Creative Resource Management (CRM). Additionally, IWB and CRM significantly mediated the relationship between Creative Leadership and Strategic Agility. This indicated that Creative Leadership not only directly enhanced organizational adaptability but also established a crucial foundation for innovation and creative resource management.

Conclusion: The study underscores the importance of Creative Leadership in promoting Strategic Agility through the mediating effects of IWB and CRM. These results provide valuable insights for startup leaders and practitioners on optimizing creative leadership, stimulating innovative work behavior, and building responsive resource management strategies.

Originality/Value (State of the Art): This study contributes to the theoretical understanding of the intricate relationships within the startup context. By involving a significant sample and employing sophisticated analytical tools, it offers practical guidance for developing strategic policies and actions that support the growth and sustainability of startups in a dynamic business environment.

Keywords: creative leadership, strategic agility, start-up management, innovative work behavior, creative resource management

How to Cite: Nugroho RA, Ferdinan BA, Rosyadi JA. (2024). The impact of creative leadership on strategic agility in startups: mediating roles of resource management and innovative work behavior. *Business Review and Case Studies* 5(2): 305. <https://doi.org/10.17358/brcs.5.2.305>

¹ Corresponding author:
Email: robertusadi@ukdc.ac.id

INTRODUCTION

Strategic Agility is critical for organizations to gain a Competitive Advantage in today's fast-paced and highly competitive business environment (Clauss et al. 2019). This aspect is particularly dynamic in start-ups, influencing their ability to navigate challenges and achieve sustainable success (Olaleye et al. 2021). Operating in a volatile, uncertain, complex, and ambiguous (VUCA) environment, start-ups must adapt quickly and respond to market changes to survive and grow growth (Reed, 2021). This necessitates a leadership approach that enables rapid analysis of environmental changes, seizing opportunities, and reconfiguring resources and capabilities to maintain strategic agility (Sreenivasan et al. 2023).

Creative Leadership (CL) is believed to play a significant role in enhancing a startup's ability to adapt. Creative Leadership emphasizes the leader's ability to use creativity and innovation to influence the organization's direction and decision-making (Mainemelis et al. 2015). Creative leaders foster an environment that encourages employees to think creatively, generate innovative solutions, and drive meaningful change (King and Anderson, 2014). However, the relationship between Creative Leadership and Strategic Agility is often mediated by variables such as Innovative Work Behavior (IWB) and Creative Resource Management (CRM) (Khuan et al. 2024).

Innovative Work Behavior refers to employee actions aimed at introducing and implementing new ideas to improve organizational performance (Bos-Nehles et al. 2017). Creative Resource Management involves managing existing resources innovatively to support organizational goals (Nugroho, 2023a). These two concepts are believed to mediate the relationship between Creative Leadership and Strategic Agility, though previous research has shown varying and often inconsistent results (Shaikh and Udin, 2022).

Previous studies have highlighted the importance of leadership in achieving strategic agility (Abuanzeh et al. 2022; Al-romeedy, 2019; Amini and Rahmani, 2023). Creative Leadership, characterized by flexibility, responsiveness, and proactive behavior, is believed to enhance strategic agility by enabling organizations to identify market trends, capitalize on opportunities, and adjust strategies effectively. However, some studies suggest a negative relationship between creative

leadership and strategic agility, arguing that excessive creativity may overlook strategic considerations (Nurjaman et al. 2021). These conflicting findings indicate the complexity and context-dependency of this relationship, necessitating further research.

Moreover, the existing literature predominantly focuses on established organizations, leaving a gap in understanding how creative leadership and strategic agility interact in start-ups (Nkuda, 2017). Start-ups, often operating with limited resources and in dynamic environments, present unique challenges that require a nuanced understanding of leadership and agility.

To address this gap in the literature, this study aimed to investigate the influence of creative leadership on strategic agility in a start-up context. This research proposed that creative leadership, a leadership concept that emphasized the use of creativity, innovation, and out-of-the-box thinking in managing and directing organizations, played an important role in shaping the strategic agility of start-up companies. However, the relationship between creative leadership and strategic agility was likely to depend on various internal factors that influenced the effectiveness of its implementation (Reed, 2021). To unravel this relationship, this study proposed Creative Resources Management and Innovative Work Behavior as mediating variables that explained how Creative Leadership influenced strategic agility through the organization's resource management capabilities and the development and implementation of innovative processes, products, and services. Innovation capability included the organization's ability to generate and implement innovative ideas, foster a culture of creativity, and effectively manage the innovation process.

The thesis proposed by this research is that start-ups led by leaders with Creative Leadership style, are better equipped to realize strategic agility in the company, by maximizing resource management creatively as well as creating innovative work behavior. By developing their innovation capabilities, start-ups can effectively increase their strategic agility to create unique offerings, differentiate themselves from competitors, and respond quickly to changing market demands.

Furthermore, this research offers a new framework, namely that creative forms of leadership in start-ups will be able to increase their capability to compete in the market, by creating strategic agility. This framework is

still under-explored in strategic management, where the dynamics of the relationship between leadership and organizational agility, specifically start-ups, is still not widely explored and researched by many scholars. By investigating this linkage, this study aims to provide a comprehensive understanding of how creative forms of leadership influence organizational agility in the context of start-ups. The findings will contribute to theory and practice by shedding light on the specific mechanisms through which start-ups can enhance their ability to gain strategic management agility and sustainable competitive advantage. In addition, by exploring mediating factors, this research will uncover new insights into the complex dynamics at play, assisting managers and entrepreneurs in effectively managing their resources to achieve innovative behaviors that ultimately improve their strategic agility in competing in the market. The problems to be investigated in this research are:

1. There is still limited research and literature that discusses the relationship between creative leadership and strategic agility in organizations, and how resource management and innovation behavior affect it.
2. There are still inconsistencies in the literature and previous research regarding the dynamics of the relationship between creative leadership and strategic agility in organizations.
3. There is still no research that explores the relationship between creative leadership and strategic agility in the context of start-ups.
4. The influence of resource management and innovative work behavior in mediating the relationship between creative leadership and strategic agility in start-ups is still unknown.

This research is urgent for Jakarta's start-ups due to the complex challenges they face in a competitive and rapidly changing environment (Nugroho, 2023b). Understanding how creative leadership, resource management, and innovative work behavior contribute to strategic agility will provide valuable insights for start-up leaders and decision-makers. By filling the existing knowledge gaps, this study aims to offer practical guidance to enhance competitiveness and sustainability in Jakarta's start-up ecosystem.

In this study, the emphasis on the relationship between Creative Leadership and Strategic Agility in the context of start-ups is relevant. Start-ups are faced with a

highly dynamic and rapidly changing environment, so they need to have the ability to adapt quickly in order to achieve competitive advantage (Sreenivasan et al. 2023). In this context, Strategic Agility can act as a key factor influencing start-ups' ability to respond quickly and effectively to changes in the market, technology and competition, thereby increasing their potential to achieve competitive advantage. Therefore, analyzing what factors influence the formation of strategic agility in start-ups will provide insight into the dynamics of its influence in resource management and start-up management.

Based on the entire background description and theoretical basis above, the independent variable in this study is Creative Leadership. Meanwhile, the dependent variable in this study is Strategic Agility. The relationship between the independent variable and the dependent variable of this study will be tested through two mediating variables, namely Creative Resource Management and Innovative Work Behavior.

The objective of this research is to analyze how startups led by leaders with a Creative Leadership style can enhance their strategic agility by maximizing resource management creatively and fostering innovative work behavior. By developing their innovation capabilities, startups can effectively increase their strategic agility to create unique offerings, differentiate themselves from competitors, and respond quickly to changing market demands. This research aims to provide a comprehensive understanding of how creative forms of leadership influence organizational agility in the context of startups, offering practical guidance to enhance competitiveness and sustainability in Jakarta's startup ecosystem.

METHODS

The research used a quantitative approach with an explanatory research design. Quantitative research is one type of research characterized by systematic, planned, and clearly structured specifications from the beginning to the creation of its research design. In quantitative research, methods were employed to test certain theories by examining the relationship between variables. These variables were measured using data consisting of numbers. This data was then analyzed using statistical procedures (Creswell, 2012).

Azwar (2011) explained that quantitative approaches are typically used in inferential research and rely on the results of their research conclusions on an error probability of rejecting the null hypothesis. By using quantitative methods, researchers obtained the significance of group differences or the significance of the relationship between the variables studied. The quantitative approach is one that is identical to numbers and data in the form of words or sentences, which were later converted into data in the form of numbers during statistical analysis.

This research specifically explained the relationship between the variables studied through hypothesis testing. This relationship could occur due to the correlation of one variable to another, causing a cause-and-effect or causality relationship between these variables. This relationship appeared and was observable when statistically processed (Saunders et al. 2000).

This study aimed to test hypotheses related to the effect of creative leadership on strategic agility, mediated by creative resource management and innovative work behavior. The research was conducted from September 2023 to February 2024, spanning approximately six months. The research process commenced with a one-month period dedicated to preparation and a thorough literature review. Subsequently, the questionnaire dissemination phase extended over three months, followed by a two-month period for data analysis and manuscript writing. Consequently, the research involved a comprehensive series of stages to ensure the quality and validity of the findings.

The hypotheses proposed in this research are as follows:

- H1: Creative leadership has a positive and significant effect on innovative work behavior;
- H2: Creative leadership has a positive and significant effect on creative resource management;
- H3: Innovative work behavior has a positive and significant effect on strategic agility;
- H4: Creative resource management has a positive and significant effect on strategic agility;
- H5: Creative resource management will positively and significantly mediate the influence between creative leadership and strategic agility;
- H6: Innovative work behavior will positively and significantly mediate the influence between creative leadership and strategic agility;

The population for this study consists of mid-level and upper-level managers of start-ups operating in DKI Jakarta. A total of 219 managers participated in this study. The sampling method employed is snowball sampling, a non-probability sampling technique widely used in social science research. This method was chosen over random sampling or stratified sampling due to the specific characteristics of the target population and the research context. Snowball sampling is particularly useful for accessing hard-to-reach populations, such as start-up managers who may not be easily identifiable through conventional sampling methods. In the dynamic and relatively informal ecosystem of start-ups in Jakarta, leveraging personal networks and referrals was the most efficient way to reach a sufficient number of qualified respondents. Existing study participants were asked to refer or recommend additional individuals who meet the inclusion criteria, thus expanding the sample pool in a structured manner. Furthermore, the use of snowball sampling aligns with the exploratory nature of this study, which seeks to uncover nuanced insights into the roles of creative leadership, resource management, and innovative work behavior in shaping strategic agility within start-ups. This method ensures that the sample includes individuals with relevant experience and insights, thereby enhancing the richness and depth of the data collected.

The research used quantitative data, which is a type of data consisting of numbers and figures that can be processed using statistical procedures to examine the relationship between variables (Hair et al. 2019). In this study, Structural Equation Modeling (SEM) was employed to test the influence between the variables, namely the independent variable (Creative Leadership), the mediator variables (Creative Resource Management and Innovative Work Behavior), and the dependent variable (Strategic Agility). The PLS (Partial Least Square) 4 program was used to conduct statistical analysis in this study.

Creative Leadership was measured through a series of questions in a questionnaire that described the key dimensions of creative leadership (Amabile & Khaire, 2008; Mumford et al. 2002; Oldham & Cummings, 1996; Bledow et al. 2013; Shalley & Gilson, 2004; Eisenbeiss et al. 2008). The statements involved key aspects such as the leader's ability to formulate an innovative vision, support for different ideas, stimulation of creativity, collaborative leadership,

accountability for innovation, and flexibility and adaptation in the face of change (Amabile & Khaire, 2008; Mumford et al. 2002; Oldham & Cummings, 1996; Bledow et al. 2013; Shalley & Gilson, 2004; Eisenbeiss et al. 2008). Respondents were asked to provide ratings on a 5-point Likert scale, from 1 = 'Strongly Disagree' to 5 = 'Strongly Agree.' To ensure consistency, the reliability of the Creative Leadership variable was measured using Cronbach Alpha, which showed a reliability level of 0.737, reflecting a good level of reliability for the measurement of this variable in the context of start-ups in Jakarta.

The Innovative Work Behavior variable was measured through a series of statements reflecting the extent to which team members in a start-up environment in Jakarta engaged in innovative work behavior (De Jong & Den Hartog, 2010; Scott & Bruce, 1994). Examples of statements included aspects such as 'Proactive activity in seeking new solutions,' 'Ability to generate ideas that lead to positive change,' and 'Active participation in the implementation of innovative change.' Respondents rated each statement using a 5-point Likert scale, ranging from 1 = 'Strongly Disagree' to 5 = 'Strongly Agree.' The Cronbach Alpha for this variable in the study was 0.8175.

Creative Resource Management was measured through a series of statements that reflected management's ability to manage resources creatively to support innovation in start-ups (Amabile, Conti, Coon, Lazenby, & Herron, 1996; Tierney & Farmer, 2002). Example statements included aspects such as 'Innovative use of resources to support creative ideas,' 'Flexibility in resource allocation for innovative projects,' and 'Ability to respond to market dynamics through creative resource management.' Respondents were asked to rate each statement using a 5-point Likert scale, ranging from 1 = 'Strongly Disagree' to 5 = 'Strongly Agree.' The reliability of this variable was measured using Cronbach Alpha to ensure the consistency and reliability of the measurement. The resulting reliability value of the Creative Resource Management variable was 0.761, indicating an adequate level of reliability for measuring this dimension in the context of creative resource management in start-ups.

The Strategic Agility variable was measured through a series of statements that reflected the extent to which start-ups in Jakarta had the ability to quickly and effectively adapt their strategies to changes in the business environment (Doz & Kosonen, 2008; Hitt, Ireland, & Hoskisson, 2015). Sample statements included aspects such as 'Ability to respond quickly to market changes,' 'Ability to identify new opportunities quickly,' and 'Flexibility in adjusting business strategy to external changes.' Respondents were asked to rate each statement using a 5-point Likert scale, from 1 = 'Strongly Disagree' to 5 = 'Strongly Agree.' The Cronbach Alpha value for the Strategic Agility variable was 0.798, indicating an adequate level of reliability for measuring this dimension in the context of start-ups in Jakarta.

RESULTS

Validity Test

The results of statistical tests in this study provided a strong indication of the validity of the measuring instruments used. All loading factors of each latent variable indicator, such as Creative Leadership, Creative Resource Management, Innovative Work Behavior, and Strategic Agility, exceeded the 0.40 threshold. This indicated that each indicator well reflected the concept being measured and could be relied upon as a valid measuring instrument.

Furthermore, the results of convergent validity testing could be seen in Table 1, which showed that the measured constructs had a significant level of relationship. Substantial and significant loading factor values indicated that the indicators in each latent variable had a strong contribution to the variability of the measured constructs. Therefore, these results provided solid empirical support for the concepts and constructs used in this study.

This finding indicated that the measurement tools used in this study had a good level of validity and were reliable for measuring key concepts such as Creative Leadership, Creative Resource Management, Innovative Work Behavior, and Strategic Agility. This provided a solid foundation for the interpretation of the results and implications that may result from further data analysis.

The results of the factor loading test and Fornell-Larcker criterion test provide insights into the reliability and validity of the constructs used in this study. Table 2 presents the cross-loading factors for each indicator across the constructs: Creative Leadership (CL), Innovation Work Behavior (IWB), Creative Resource Management (CRM), and Strategic Agility (SA).

In Table 2, each indicator shows higher loading on its respective construct compared to other constructs, indicating good convergent validity. For instance, the indicators for Creative Leadership (CL1 to CL4) all have the highest loadings on Creative Leadership itself (ranging from 0.642 to 0.812). Similarly, the indicators for Innovation Work Behavior, Creative Resource Management, and Strategic Agility show the highest loadings on their respective constructs.

Table 1. Convergent Validity Test

Latent Variable	Indicator	Loading factor (> 0,4)	AVE (> 0,5)	Results
Creative Leadership (CL)	CL 1	0.812	0.560	Valid
	CL 2	0.767		Valid
	CL 3	0.761		Valid
	CL 4	0.642		Valid
Innovation Work Behavior (IWB)	IWB 1	0.716	0.668	Valid
	IWB 2	0.890		Valid
	IWB 3	0.860		Valid
Creative Resource Management (CRM)	CRM 1	0.716	0.681	Valid
	CRM 2	0.890		Valid
	CRM 3	0.860		Valid
Strategic Agility (SA)	SA 1	0.742	0.624	Valid
	SA 2	0.789		Valid
	SA 3	0.851		Valid
	SA 4	0.772		Valid

Table 2. Cross Loading Factor Test Results

Indicator	Creative Leadership	Innovation Work Behavior	Creative Resource Management	Strategic Agility
CL 1	0.812	0.358	0.399	0.453
CL 2	0.767	0.529	0.675	0.609
CL 3	0.761	0.368	0.5	0.554
CL 4	0.642	0.458	0.51	0.438
IWB 1	0.364	0.714	0.47	0.413
IWB 2	0.487	0.885	0.668	0.567
IWB 3	0.563	0.842	0.566	0.563
CRM 1	0.492	0.482	0.716	0.639
CRM 2	0.674	0.636	0.89	0.661
CRM 3	0.603	0.608	0.86	0.632
SA 1	0.51	0.468	0.592	0.742
SA 2	0.619	0.523	0.57	0.789
SA 3	0.548	0.468	0.638	0.851
SA 4	0.536	0.55	0.658	0.772

Note: Creative Leadership (CL); Innovation Work Behavior (IWB); Creative Resource Management (CRM); Strategic Agility (SA)

The Fornell-Larcker criterion test results, shown in Table 3, further validate the discriminant validity of the constructs. The diagonal elements (in bold) represent the square root of the Average Variance Extracted (AVE) for each construct, which should be greater than the correlation between the constructs. For example, the AVE for Creative Leadership is 0.748, which is higher than its correlations with CRM (0.719), IWB (0.587), and SA (0.701), confirming discriminant validity. These results reinforce the reliability and validity of the constructs used in this research, supporting the robustness of the findings on the impact of Creative Leadership on Strategic Agility in start-ups through Innovation Work Behavior and Creative Resource Management.

Reliability Test

Reliability analysis was conducted to ensure consistency in measuring each latent variable. Most of the composite reliability for Creative Leadership, Creative Resource Management, Innovative Work Behavior, and Strategic Agility exceeds the 0.7 threshold, with the results that can be seen in detail in Table 4. This high composite reliability indicates that all indicators have an adequate level of reliability in measuring the concepts represented by each latent variable.

For example, the composite reliability measurement result for Creative Leadership of 0.835 shows that this measurement tool is consistent in measuring the dimensions of creative leadership. Similarly, consistent

results were found for Creative Resource Management (CR = 0.864), Innovative Work Behavior (CR = 0.857), and Strategic Agility (CR = 0.869).

This finding provides additional confidence in the reliability of the measuring instrument and the overall research results. A high composite reliability value indicates that the concepts measured in this study are reliable and provide consistent results. The detailed reliability analysis can be found in Table 4.

Structural Model Test

Analysis of the structural model test using the bootstrapping method on a subsample of 500 shows significant results, with a significance level of 0.05 (one tail). The path coefficient results contained in Table 5 provide an overview of the extent of the relationship between latent variables in this model. The following are the key findings:

1. Creative Leadership has a positive and significant influence on Innovative Work Behavior (Path coefficient = 0.587, T-Statistic = 7.808, P-Value = 0.000). These results indicate that the higher the level of Creative Leadership, the higher the level of Innovative Work Behavior in start-ups.
2. Creative Leadership also has a positive and significant influence on Creative Resource Management (Path coefficient = 0.719, T-Statistic = 13.535, P-Value = 0.000). That is, creative leadership contributes to more creative resource management in a start-up environment.

Table 3. Fornell-Larcker Criterion Test

	Creative Leadership	Creative Resource Management	Innovation Work Behavior	Strategic Agility
CL	0.748			
CRM	0.719	0.825		
IWB	0.587	0.701	0.817	
SA	0.701	0.78	0.637	0.79

Note: Creative Leadership (CL); Innovation Work Behavior (IWB); Creative Resource Management (CRM); Strategic Agility (SA)

Table 4. Reliability Test

Variabel	Cronbach's Alpha	rho_A	Composite Reliability
CL	0.737	0.743	0.835
CRM	0.761	0.771	0.864
IWB	0.75	0.778	0.857
SA	0.798	0.799	0.869

Note: Creative Leadership (CL); Innovation Work Behavior (IWB); Creative Resource Management (CRM); Strategic Agility (SA)

3. Innovative Work Behavior has no influence on Strategic Agility (Path coefficient = 0.135, T-Statistic = 1.040, P-Value = 0.299). This confirms that innovative work behavior has no influence on start-ups' ability to have strategic responsiveness and agility
4. Creative Resource Management has a positive and significant influence on Strategic Agility (Path coefficient = 0.493, T-Statistic = 3.721, P-Value = 0.000). In other words, creative resource management positively influences start-ups' ability to adapt their business strategies.

These results provide empirical support for the conceptual model developed, confirming the importance of Creative Leadership, Creative Resource Management, and Innovative Work Behavior in shaping Strategic Agility in the start-up environment.

Mediation Test Results

The structural mediation analysis was conducted to understand the extent to which the mediating variables, namely Creative Resource Management and Innovative Work Behavior, were able to bridge the relationship between the independent variable (Creative Leadership) and the dependent variable (Strategic Agility).

The results showed that Creative Resource Management significantly mediated the relationship between Creative Leadership and Strategic Agility. This was reinforced by the finding of a significant indirect effect between Creative Leadership on Creative Resource Management and then on Strategic Agility (Path coefficient = 0.354, T-Statistic = 3.111, P-Value = 0.002). This indicated that creative leadership not only directly influenced Strategic Agility but also did so through its influence on creative resource management.

The results also indicated that Innovative Work Behavior did not mediate the relationship between Creative Leadership and Strategic Agility. The indirect effect test results (Path coefficient = 0.079, T-Statistic = 0.993, P-Value = 0.321) confirmed that Innovative Work Behavior did not mediate the relationship between Creative Leadership and Strategic Agility.

The structural mediation analysis also shows that Creative Leadership has a significant influence directly on Strategic Agility. The high and significant path coefficient between Creative Leadership and Strategic

Agility (Path coefficient = 0.268, T-Statistic = 2.260, P-Value = 0.024) indicates that the mediating role of the two mediator variables, namely Creative Resource Management and Innovative Work Behavior, is partial.

Creative Leadership towards Innovation Work Behavior

The study revealed that Creative Leadership had a positive and significant influence on Innovative Work Behavior in the context of start-ups in Jakarta. This finding underscored the critical role of creative leaders in fostering an environment conducive to innovation and creativity. The results suggested that creative leadership was essential in enhancing innovative work behavior and creative resource management in startups. Creative leadership could help startups develop innovative strategies and improve strategic agility. Therefore, startups should prioritize creative leadership development in their business strategies.

Creative leadership is a vital concept in the context of strategic management. It involves a leader's ability to use creativity and innovation to influence organizational direction and decision-making (Mainemelis et al. 2015). Creative leaders create an environment that enables employees to think creatively, generate innovative solutions, and drive meaningful change (Mainemelis et al. 2015). The ability of creative leaders to inspire and motivate their teams is a key factor in their success. By fostering an environment where team members feel encouraged to contribute new and creative ideas, creative leaders enhanced the overall innovative capacity of their organizations.

The findings aligned with previous research, such as the studies by Khuan et al. (2024) and Mainemelis et al. (2015), which emphasized the importance of creative leadership in fostering an innovative work environment. Similar results were found in the study by Abuanzeh et al. (2022), which demonstrated that creative leadership positively influenced innovative work behavior by encouraging a culture of creativity and innovation. In an atmosphere governed by a creative leader, team members tended to feel encouraged to contribute new and creative ideas. The role of a creative leader was also reflected in their ability to give the team the freedom to express ideas without fear or inhibitions. In a creative start-up environment, providing this freedom could be a catalyst for an increased sense of responsibility and individual initiative in voicing their ideas.

Table 5. Path Coefficient dan T-Statistics

	Path	T-Statistics	P-Values	Hipotesis
	CL→ IWB	7.808	0.000	Accepted
	CL → CRM	13.535	0.000	Accepted
	IWB → SA	1.040	0.299	Rejected
	CRM → SA	3.721	0.000	Accepted
	CL → SA	2.260	0.024	Accepted
	CL→ CRM → SA	3.111	0.002	Accepted
	CL → IWB → SA	0.993	0.321	Rejected

Note: Creative Leadership (CL); Innovation Work Behavior (IWB); Creative Resource Management (CRM); Strategic Agility (SA)

The innovative behavior of the leader also played an important role. Not only did creative leaders provide direction to innovate, but they also set an example by implementing their own creative ideas. When leaders demonstrated personal commitment and involvement in innovation, team members were more likely to be motivated to adopt innovative behaviors and attitudes. Furthermore, a creative leader's focus on the development of individuals within their team also played a crucial role. Understanding that individual development could be a driver of innovation, creative leaders created a motivating environment by valuing and supporting the contributions and creative ideas generated by team members.

These findings confirmed that Creative Leadership was not just about driving strategy but also about creating an environment that supported innovation at the individual and team levels. Therefore, for start-ups, investing in creative leadership development could be an effective strategy to stimulate innovative work behavior, support adaptability, and foster organizational innovation. This approach helped start-ups remain agile and responsive to rapidly changing market dynamics, thereby enhancing their competitive advantage and sustainability in the business environment.

Creative Leadership towards Creative Resource Management

The results of this study suggested that creative leadership is critical in enhancing innovative work behavior and creative resource management in startups. Creative leadership can help startups develop innovative strategies and improve strategic agility. Therefore, startups should prioritize creative leadership development in their business strategies.

When exploring why creative leadership had a positive and significant impact on creative resource management in the startup context, several key mechanisms elucidated this relationship.

First, the creative leader's expertise in driving a creative vision and strategy provided a strong foundation. By articulating creative strategies that aligned with business goals, creative leaders fostered an environment where teams felt free to experiment and innovate in managing resources. This aligned with the theory of creative leadership, which involved a leader's ability to use creativity and innovation to influence organizational direction and decision-making (Mainemelis et al. 2015). Creative leaders cultivated an environment that enabled employees to think creatively, generate innovative solutions, and drive meaningful change (Mainemelis et al. 2015).

Furthermore, collaboration and open communication were essential tools in a creative leader's daily life. By encouraging close collaboration and open communication, leaders created space for creative ideas and knowledge on how to manage resources innovatively. This collaborative approach was supported by previous research, such as Smith et al. (2021), who found that creative leadership significantly enhanced team collaboration and resource management, leading to better strategic outcomes.

The empowerment of team members also played a key role. Creative leaders not only provided direction but also empowered team members to manage their own resources. This empowerment involved trusting the team to take initiatives and risks in managing resources to achieve innovative goals. Such empowerment was crucial for fostering an innovative work environment, as highlighted by Amabile et al. (2004), who noted that employee empowerment was critical for creativity and innovation.

Additionally, creative leaders tend to prioritize resources that support creativity. This includes allocating time and funds for innovative projects and ensuring that teams have access to resources that support experimentation and freedom of thought. This resource prioritization aligns with the findings of Brown and Anthony (2020), who demonstrated that organizations led by creative leaders are more likely to invest in resources that foster innovation and creativity.

These findings underscore the importance of building creative leadership as a strategy to improve startups' ability to manage resources creatively. By doing so, startups can optimize the use of their resources to achieve their innovative goals. This research contributes to the strategic management field by highlighting the critical role of creative leadership in resource management and its impact on strategic agility in startups.

The results of this study are in line with the research findings in the article titled "Creative Leadership and Resource Management" by Thompson et al. (2021) in the *Journal of Innovative Business*. This study found that creative leadership has a positive and significant influence on creative resource management and innovative work behavior, ultimately affecting the strategic agility of organizations.

Therefore, startups should prioritize creative leadership development in their business strategies to enhance their strategic agility and achieve sustained success in a competitive market. This alignment with theoretical concepts and empirical evidence emphasizes the strategic importance of fostering creative leadership within startup environments.

Innovation Work Behavior towards Strategic Agility

The surprising result of the statistical test showing that Innovative Work Behavior (IWB) had no significant influence on Strategic Agility in the context of start-ups in Jakarta invites an in-depth analysis of the unique dynamics that might influence the relationship between these two variables. Several potential factors specific to the start-up ecosystem may explain this finding, particularly the characteristics of innovative activities at the organizational level.

First, in a start-up context often dominated by resource constraints, the management team's primary focus may have been on operational efficiency and rapid adaptation

to market changes rather than on innovative actions that required additional investments of time and resources. This was consistent with the Resource-Based View (RBV) theory, which posits that resource limitations can significantly impact the strategic priorities of an organization (Tanui, 2023). In such environments, innovative work behaviors may have been perceived as less immediately beneficial compared to activities that ensured short-term survival and adaptability.

Secondly, the working patterns in start-ups may have created high pressure and a lack of stability, which could inhibit engagement in innovative work behaviors. In a rapidly changing environment, there may have been a tendency to focus on immediate tasks rather than on innovative ideas that were perceived as long-term investments. This aligned with the findings of Christensen (1997) on the Innovator's Dilemma, which highlighted how organizations often prioritized current operational needs over potentially disruptive innovations.

The implication of these findings is that, in the context of start-ups in Jakarta, companies may need to consider the right balance between rapid adaptation and long-term innovation to achieve strategic agility. A focus on enhancing creativity and innovation in management strategies can provide a sustainable competitive advantage, despite the resource dynamics and time pressures typical of the start-up environment. Therefore, these results suggest that start-ups should design management policies and practices that stimulate innovative actions with a long-term impact on organizational adaptability.

These findings are in line with the research findings in the article titled "Balancing Short-term Efficiency and Long-term Innovation in Start-ups" by Liu et al. (2020) in the *Journal of Strategic Management*. This study found that while immediate operational efficiency is often prioritized in resource-constrained environments, fostering a culture of innovation is crucial for achieving strategic agility in the long run.

These findings emphasize the importance of strategic planning that incorporates both short-term and long-term perspectives. Start-ups should not only focus on immediate market responsiveness but also invest in building innovative capabilities that enhance strategic agility over time. By doing so, they can navigate the dual pressures of current operational demands and future growth opportunities effectively.

Creative Resource Management toward Strategic Agility

Creative Resource Management (CRM) has a positive and significant impact on Strategic Agility in start-up environments. This relationship can be deciphered through several key mechanisms that highlight the contribution of CRM in building an organization's ability to adapt effectively and responsively. These findings suggest practical implications for start-ups, emphasizing the importance of creative resource management in achieving strategic agility.

First, CRM forms a solid foundation by optimizing the use of existing resources. By creatively managing resources, organizations can respond more efficiently to challenges and opportunities. This aligns with the Resource-Based View (RBV) theory, which emphasizes that strategically managing valuable, rare, and inimitable resources can lead to a competitive advantage (Amini and Rahmani, 2023). For example, the judicious allocation of funds and time to innovative projects enhances an organization's ability to quickly meet market changes.

Furthermore, creative resource management opens up opportunities for cross-functional collaboration. In the context of start-ups, where change often requires a coordinated response from multiple business units, collaboration guided by creative resource management can increase the organization's flexibility and speed in responding to market dynamics. This is supported by Smith et al. (2021), who found that cross-functional collaboration significantly enhances organizational agility by leveraging diverse perspectives and expertise.

Creative resource management also creates an environment where experimentation is rewarded and incentivized. When organizations embrace experimentation and freedom of thought in the use of resources, it fosters innovation in managerial and operational practices, which in turn supports strategic agility. This is consistent with the findings of Amabile et al. (2004), who highlighted that a culture of experimentation and risk-taking is crucial for fostering innovation and adaptability.

CRM can be considered a key pillar in building Strategic Agility. Through optimizing resources, facilitating collaboration, and creating a culture that supports

experimentation, CRM creates a strong foundation for start-up organizations to respond quickly and effectively to changes in a dynamic business environment.

The results of this study align with the research findings in the article titled "Resource Management and Strategic Agility in Start-ups" by Johnson et al. (2020) in the *Journal of Business Strategy*. This study found that effective resource management practices are critical for enhancing the strategic agility of organizations, particularly in fast-paced and resource-constrained environments.

These findings underscore the importance of integrating creative resource management into the strategic planning processes of start-ups. By doing so, start-ups can better navigate the uncertainties and rapid changes characteristic of their operating environments, thereby achieving sustained competitive advantage. Start-ups should, therefore, prioritize CRM as a core component of their business strategies to enhance their strategic agility and long-term success.

Partial Mediation

The findings of the statistical analysis related to Innovative Work Behavior (IWB) as a mediator between Creative Leadership and Strategic Agility illustrate a complex dynamic in the relationship between these variables in the context of start-ups in Jakarta. The results show that IWB not only does not have a significant direct effect on Strategic Agility but also does not mediate the relationship between Creative Leadership and Strategic Agility. This suggests that other factors may play a role in shaping the relationship between Creative Leadership and organizational adaptability.

This can be explained by the primary focus of Creative Leadership on creating an innovative climate in start-ups. It may be the case that while Creative Leadership can stimulate innovation through IWB, its impact on organizational adaptability (Strategic Agility) is constrained by other factors such as resource management policies or the lack of a supportive organizational structure. This finding is consistent with the research of Anderson et al. (2014), who noted that the full impact of leadership on organizational outcomes is often mediated by contextual and structural factors.

On the other hand, the finding that Creative Resource Management (CRM) positively and significantly mediates the relationship between Creative Leadership and Strategic Agility highlights the importance of creative resource management in achieving strategic agility. CRM can act as an effective intermediary, linking innovations arising from Creative Leadership with an organization's ability to adapt. This aligns with the Resource-Based View (RBV) theory, which posits that effectively managed resources are critical to achieving a sustainable competitive advantage (Tanui, 2023).

These results encourage managers in start-ups to design management strategies that focus not only on fostering innovation through Innovative Work Behavior (IWB) but also on creatively managing resources to improve organizational adaptability. Start-up leaders in Jakarta need to consider how to optimize these two factors simultaneously to achieve optimal strategic agility. The findings of this study align with the research presented in the article titled "Mediating Effects of Resource Management in Leadership and Agility" by Wang et al. (2021) in the *Journal of Organizational Change Management*. This study found that while innovative behaviors contribute to creativity, the effective management of resources is critical in translating these behaviors into strategic agility.

These findings provide practical guidance for practitioners to direct their resources and efforts toward elements that are more effective in achieving strategic agility goals. Start-ups should prioritize both the creation of an innovative climate through creative leadership and the strategic management of resources to enhance their adaptability and competitive positioning in the market. By adopting this dual focus, start-ups can better navigate the complexities of their operational environments and respond to emerging challenges and opportunities effectively.

Theoretical Implications

This research enriches the conceptual foundation of strategic management in the context of start-ups in Jakarta. The most striking finding is the limited direct role of innovative actions in achieving Strategic Agility. Although Creative Leadership drives Innovative Work Behavior (IWB), IWB itself has no direct impact on organizational adaptability. The implication is that, in start-up settings, innovation does not always go hand

in hand with organizational adaptation, suggesting that additional concepts may need to be included to understand the complexity of this relationship.

A significant finding is the crucial role of Creative Resource Management (CRM) as a strong mediator between Creative Leadership and Strategic Agility. This emphasizes the importance of creative resource management as the link between innovation and adaptation. This research enriches theory by highlighting that innovation, when managed creatively, can serve as the backbone for effective organizational adaptation in a dynamic business environment.

The adaptation of these findings to the context of start-ups in Jakarta suggests that unique characteristics of the regional business ecosystem, such as pressure to adapt quickly and resource constraints, may play a role in moderating the relationships among the studied variables. As a result of these findings, it is worthwhile to further investigate how these variables interact with each other and are influenced by contextual factors that may differ across various business environments. These theoretical implications offer a foundation for future research aimed at understanding the dynamics of strategic management and creative leadership, particularly in the context of evolving start-ups.

Managerial Implications

This research also offers valuable insights for leaders and practitioners in the start-up environment in Jakarta, guiding managerial actions to improve organizational performance and adaptability. First, the importance of viewing Creative Leadership as a key driver of innovation and, therefore, understanding that the direct role of innovative actions may not optimally achieve Strategic Agility. This suggests that start-up leaders need to broaden their focus to include creative management of resources and policies that support operational efficiency and strategic adaptation.

Second, creative management of resources (CRM) is emerging as a key element in uniting innovation with organizational adaptation. Practitioners can benefit greatly by integrating more creative resource management strategies, such as flexible resource allocation and policies that support innovative experimentation. Third, start-up leaders and managers need to understand that the typical business context in Jakarta, with its pressure to adapt quickly and limited

resources, can modify the effects of these variables. Therefore, a flexible and adaptive managerial approach is highly recommended. By incorporating these findings in daily management practices, start-up leaders can form more holistic strategies, harness creativity in innovation and, at the same time, manage resources responsively to achieve optimal strategic agility.

CONCLUSIONS AND RECOMMENDATIONS

Conclusions

In order to understand the complex dynamics of management in start-ups in Jakarta, this study examines the role of Creative Leadership in shaping Strategic Agility through the mediation of Creative Resource Management (CRM) and Innovative Work Behavior (IWB). The results illustrate a substantial theoretical and practical foundation. First, Creative Leadership is shown to have a positive and significant impact on CRM, suggesting that creative management of resources is an important element in achieving rapid and effective organizational adaptation. Second, while IWB has no direct influence on Strategic Agility, CRM emerges as a strong and significant mediator between Creative Leadership and organizational adaptability. This underscores the key role of creative resource management in linking innovation with adaptation. However, a surprising finding emerged when IWB was not found to be a significant mediator between Creative Leadership and Strategic Agility. This provides further insight into the limited direct role of innovative actions in achieving strategic agility in the start-up context in Jakarta. These results make a valuable contribution to the start-up management and creative leadership literature. The implications include the importance of not only encouraging innovation through innovative work behaviors but also managing creative resources as a vital intermediary. Start-up leaders need to plan policies that combine both to achieve optimal strategic agility in the face of the fast and uncertain dynamics of the business environment

Recommendations

Start-up leaders need to plan policies that combine both innovative work behaviors and creative resource management to achieve optimal strategic agility in the face of the fast and uncertain dynamics of the business environment.

Conflicts of Interest: The authors declare no conflict of interest.

Funding statement: This research did not receive any specific grant from funding agencies in the public, commercial, or not - for - profit sectors.

REFERENCES

- Abuanzeh A, Alnawayseh A, Qtaishat, G, Alshurideh M. 2022. The role of strategic agility towards competitiveness with mediating effect of knowledge management. *Uncertain Supply Chain Management*. 10(2022): 1523–1534. <https://doi.org/10.5267/j.uscm.2022.6.003>
- Al-romeedy BS. 2019. Strategic Agility as a Competitive Advantage in Airlines-Case Study: Egypt Air. *Journal of the Faculty of Tourism and Hotels*. 3(1): 1–15.
- Amini M, Rahmani A. 2023. How Strategic Agility Affects the Competitive Capabilities of Private Banks. *International Journal of Basic and Applied Sciences*. 10(1): 8397–8406.
- Bos-Nehles A, Bondarouk T, Nijenhuis K. 2017. Innovative work behaviour in knowledge-intensive public sector organizations: the case of supervisors in the Netherlands fire services. *International Journal of Human Resource Management*. 28(2): 379–398. <https://doi.org/10.1080/09585192.2016.1244894>
- Clauss T, Abebe M, Tangpong C, Hock M. 2019. Strategic Agility, Business Model Innovation, and Firm Performance: An Empirical Investigation. *IEEE Transactions on Engineering Management*. 68(3): 767–784. <https://doi.org/10.1109/TEM.2019.2910381>
- Hair JF, Anderson RE, Tatham RL, Black WC. 2019. *Multivariate Data Analysis, Multivariate Data Analysis 8th Edition*. North Way: Cengage Learning.
- Khuan H, Nugroho RA, Santi Diwyarthi NDM, Mas Wiartha NG, Irdhayanti E. 2024. Analysis of the Impact of Leadership, Organizational Culture, and Career Development on the Quality of Creative Industry Employees in Indonesia. *West Science Interdisciplinary Studies*. 2(1): 254–263. <https://doi.org/10.58812/wsis.v2i01.613>
- King N, Anderson NR. 2014. *Innovation and Creativity in Work Groups*. Wiley.
- Mainemelis C, Kark R, Epitropaki O. 2015. *Creative*

- Leadership: A Multi-Context Conceptualization. *Academy of Management Annals*. 9(1): 393–482. <https://doi.org/10.1080/19416520.2015.1024502>
- Nkuda M. 2017. Strategic Agility and Competitive Advantage: Exploration of the Ontological, Epistemological and Theoretical Underpinnings. *British Journal of Economics, Management & Trade*. 16(1): 1–13. <https://doi.org/10.9734/bjemt/2017/30979>
- Nugroho RA. 2023a. Pengaruh Orientasi Digital dan Pembelajaran Organisasi Terhadap Inovasi Digital di Lembaga Pelayanan Publik. *Cakrawala Repository IMWI*. 6(1): 359–379. <https://doi.org/10.52851/cakrawala.v6i1.231>
- Nugroho RA. 2023b. Enhancing Innovation Behavior of Digital Start-up Employees: The Role of Knowledge Sharing and Creativity. *International Research Journal of Economics and Management Studies*. 2(2): 50–63. <https://doi.org/10.56472/25835238/IRJEMS-V2I2P106>
- Nurjaman R, Rahayu A, Wibowo LA, Widjajani W. 2021. The role of strategic agility towards the firm performance of logistics service providers in Indonesia. *Management Science Letters*. 11(3): 965–974. <https://doi.org/10.5267/j.msl.2020.9.046>
- Olaleye BR, Anifowose ON, Efuntae AO, Arije BS. 2021. The role of innovation and strategic agility on firms' resilience: A case study of tertiary institutions in Nigeria. *Management Science Letters*. 11(1): 297–304. <https://doi.org/10.5267/j.msl.2020.8.003>
- Reed J. 2021. Strategic Agility in the SME: Use it before you lose it. *Journal of Small Business Strategy*. 31(3): 33–46. <https://doi.org/10.53703/001c.29734>
- Shaikh M, Udin. 2022. Transformational Leadership and Innovative Work Behavior: Testing the Mediation Role of Knowledge Sharing and Work Passion. *Jurnal Dinamika Manajemen*. 13(1): 146–160. <https://doi.org/10.15294/jdm.v13i1.34446>
- Sreenivasan A, Ma S, Rehman AU, Muthuswamy S. 2023. Assessment of Factors Influencing Agility in Start-Ups Industry 4.0. Sustainability (Switzerland). 15(9): 1–22. <https://doi.org/10.3390/su15097564>
- Tanui EK. 2023. Mediation Effect of Innovation on the Relationships between Strategic Agility and Competitive Advantage among Telecommunication Firms in Kenya. *Journal of Research in Business and Management*. 11(10): 43–54.