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# Empowering village-owned enterprises: Examining leadership, innovation and government support

□ Harlina Sulistyorini¹\*, □ Margono Setiawan², Sumiati³, □ Risna Wijayanti⁴

<sup>1,2,3,4</sup>Faculty of Economics and Business, Universitas Brawijaya, Malang, Indonesia.

Corresponding Author: Harlina Sulistyorini (Email: lina\_sulistyorini@yahoo.com)

## **Abstract**

This study examined the interrelationships between leadership styles, innovation capabilities, government support and performance within the context of Village-Owned Enterprises (VOEs) in Indonesia. It investigated how these factors were interconnected and influenced the success of VOEs in East Java. The authors distributed questionnaires designed to collect data on the critical variables to 294 employees in legally certified VOEs across East Java. The collected data was analyzed using the partial least squares structural equation modelling (PLS-SEM) method. The study's findings revealed that transformational leadership, characterized by its focus on inspiring vision and empowerment significantly and transactional leadership which emphasize supervision do not directly affect the performance of VOEs but have an effect through the mediation of innovation capability and government support as moderating variables. Robust innovation capabilities had a positive impact on the financial sustainability and broader social performance of VOEs emphasizing the benefits of fostering innovation. Moreover, government support in the form of financial aid, capacity building and regulatory regulations moderated the association between innovative skills and VOE performance highlighting the significance of targeted government interventions in improving innovation outcomes. Furthermore, innovation capabilities played a vital mediating role in linking leadership styles to performance. Performance was mediated by improved innovation skills rather than being directly impacted by visionary leadership. This study had practical implications for policymakers and VOE managers, emphasizing embracing transformational leadership, fostering innovation capabilities and providing government support as interconnected drivers of success for Village-Owned Enterprises.

**Keywords:** Government support, Innovation capabilities, Leadership styles, Organizational performance, Transformational leadership, Village-owned enterprises.

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**Transparency:** The authors confirm that the manuscript is an honest, accurate, and transparent account of the study; that no vital features of the study have been omitted; and that any discrepancies from the study as planned have been explained. This study followed all ethical practices during writing.

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#### 1. Introduction

Indonesian law, specifically Law Number 6 of 2014 which deals specifically with villages governs the establishment of villages as legal community units. The village units possess geographical limits and are authorized to control and oversee governmental matters, local community interests, traditional rights and cultural heritage. The decentralization of authority in Indonesia's governance system is vital since it guarantees local autonomy while operating within the framework of the Unitary State of the Republic of Indonesia. The 2020–2024 National Medium-Term Development Plan which specifies Indonesia's development goal, recognises rural development as a crucial component due to its varied aspects. However, Indonesia's rural development journey is riddled with several obstacles. The country is facing a significant challenge in addressing a rural poverty rate of 12.9% which is twice as high as the urban poverty rate of 6.7%. A rural Gini ratio of 0.317 in contrast to the urban ratio of 0.392 indicates that income disparity presents a substantial obstacle. Moreover, the persistent issue is the inefficient use of local natural resources which often include superior rural goods.

The establishment of Village-Owned Enterprises (VOEs) in this context signifies a proactive measure to tackle these difficulties [1, 2]. The entities as mentioned earlier and stipulated in Law Number 6 of 2014 refer to enterprises that are mostly held by communities. The organization's primary aim is to effectively oversee the administration of resources, provide essential services and engage in diverse entrepreneurial endeavours for the overall betterment of the local community [3]. Law Number 6 of 2014 emphasizes managing VOEs highlighting the significance of approaching them with camaraderie and collaboration. This approach aligns with the inherent community-oriented values deeply ingrained in these organizations. The government's persistent commitment expressed in Law Number 11 of 2020 on job creation has greatly improved the status and influence of VOEs. This legislation officially acknowledges VOEs as legitimate legal entities.

Several levels of government including the presidential and ministerial levels implemented a wide range of regulations and programmes. The technological measures were explicitly devised to offer extensive assistance in the advancement of VOEs [4]. The support has expanded beyond the provision of capital aid to include production facilities, infrastructure and capacity-building training programs to enhance the management of VOEs in human resources. Village Minister Regulation No. 7 of 2021 delineated the prioritized utilization of village funds in 2022 reinforcing the synchronization of village funds with the overarching objective of national economic recuperation. The scope of this study involved establishing, growing and enhancing VOEs and their administration. Additionally, it focused on advancing and expanding economically productive enterprises overseen by VOEs [5].

Nevertheless, despite these considerable endeavours and the established legal structure, VOEs persistently confront many obstacles [6]. The challenges are complex and involve various aspects such as constraints in human resources, limited availability of capital for businesses in rural regions, underutilization of local natural resources, a lack of promotional and cooperative economic partnerships, ongoing reliance on transfers and subsidies and the persistence of a vulnerable rural economic, sociocultural and environmental framework [7]. The study aims to provide a thorough knowledge of the dynamics inside critical economic institutions by exploring linked determinants in the performance of VOEs in rural Indonesia [8].

A number of research questions that act as the driving principles for the study's efforts are the basis of this research. The initial question concerns the efficacy of leadership styles in guiding VOEs towards improved performance. This study explores the complex domain of leadership in small village firms, intending to identify the styles that influence moving these organizations towards their objectives. The subsequent inquiry expands the analysis to explore the impact of leadership on cultivating innovative capacities inside VOEs. Effective leadership plays a critical role in fostering an environment that encourages innovation and helps organizational development. The third inquiry examines the concrete influence of innovation skills on the overall performance of VOEs. This study examines how these qualities fostered through proficient leadership manifest as quantifiable results including financial prosperity and the wider societal influence that VOEs exert on their localities. The fourth inquiry presents the moderating influence of government funding in the complex interplay between innovation and VOE performance. This study focuses on how external government initiatives and regulations affect the relationship between innovation capacities and VOE results [9].

Lastly, the fifth and final inquiry explores the role of innovation skills in mediating the relationship between leadership style and VOE performance [7, 10, 11]. We identify the intermediary role of innovation capacities as the connection that connects leadership to the ultimate attainment of VOEs by analysing this phenomenon and revealing the intricate relationship between leadership, innovation and performance. The research questions presented serve as the fundamental basis of the study providing direction to enhance the comprehension of strategies for empowering VOEs as catalysts for inclusive rural economic development [12]. The study aims to provide a comprehensive understanding of the critical determinants that impact the performance of VOEs. The study's aim is to enhance the current corpus of knowledge by providing theoretical perspectives and useful suggestions that can be employed to improve the functioning of these essential economic establishments.

Several studies have examined the relationship between leadership styles and innovation in major firms. There is a dearth of study in the relatively unexplored domain of small village enterprises. The study aims to address this disparity by investigating the relationship between leadership styles and innovation as internal competencies that influence the performance of VOE initiatives. Furthermore, we examine the significance of governmental assistance from external sources, mainly designed for VOEs as a crucial factor in determining their level of achievement. The present study uses a quantitative methodology, incorporating surveys, in-depth interviews and rigorous analysis of financial data. The paper aims to gather a comprehensive dataset encompassing a wide range of VOEs throughout various rural regions of Indonesia.

The assessment of leadership styles will be conducted using proven instruments while the evaluation of innovation capacities will be performed using a combination of qualitative and quantitative measurements. A comprehensive examination will be conducted on pertinent policies and programs that directly affect vulnerable and marginalized groups commonly referred to as VOEs in order to assess the level of governmental assistance.

The study is expected to make several contributions. The aim is to provide empirical evidence in favour of leadership models in small-scale organisations from a theoretical perspective. This study aims to elucidate the complex mechanisms by which leadership impacts performance. The study aims to address a significant knowledge gap in the current body of literature by examining the connections between these variables specifically in the distinct settings of small village companies. This approach will provide a more comprehensive and detailed understanding of the subject matter. The study outcomes can provide valuable insights for developing policies and activities aimed at bolstering the capacities of VOEs and improving their overall effectiveness from a pragmatic standpoint. By identifying essential success variables, the study aims to provide VOE managers with valuable insights that can be used to assess and enhance performance. The study aims to enhance the comprehension of using VOE as inclusive catalysts for rural economic development. This study aims to examine the complex array of elements that impact the success of VOE. This study will delve into the various leadership styles, innovative capacities and the extent to which government backing affects VOE performance. The objective is to provide empirical information that adds to the theoretical understanding of leadership dynamics in small companies and the practical development of VOE performance by addressing the research topics. The project's primary objective is to enhance the capacity of VOEs to serve as catalysts for promoting inclusive rural economies.

## 2. Literature Review

Effective leadership plays a pivotal role in the foundation of any organization, offering valuable advice and direction as it adapts to changing environments and strives to accomplish its goals. The selection of a leadership style used inside an organization may profoundly impact its trajectory, determining its approach to achieving stability and fostering innovation. Leadership styles in the context of VOEs in Indonesia have gained significant attention as influential factors in determining their success [13, 14]. This paper examines and integrates four key subjects that contribute to a unified understanding of the complex relationship between leadership styles, innovation skills, government backing and organizational performance within VOEs.

The concept of leadership which encompasses several dimensions can shape the trajectory of an organization [14]. The authors have conducted studies to differentiate between transactional and transformational leadership styles and examine their effects on organizational dynamics. Transactional leadership is a leadership style that significantly emphasizes supervision and transactional interactions. This approach contributes to organizational stability by prioritizing the maintenance of order and efficiency. On the other hand, transformational leadership is characterized by a visionary approach that motivates and enables individuals to cultivate an environment favourable for the emergence of innovation and the implementation of change. Transactional leaders are characterized by their focus on task completion by implementing a reward and punishment system. Nevertheless, there has been a lack of focus on comprehending the intricacies of leadership within the distinct framework of small village companies such as VOEs despite the well-recognized division of leadership styles. The present study aims to address this disparity by examining the efficacy of several leadership strategies in VOE organizations. The study's objective is to reveal valuable insights that facilitate the growth and success of these organizations. The authors acknowledge that leadership styles have a significant role in their capacity to respond effectively to change, promote innovation and maintain stability.

The ability to innovate is a crucial factor when assessing a company's expansion and sustainability in today's highly competitive environment. Innovation capabilities refer to an organization's ability to continuously convert knowledge and ideas into authentic goods, processes or services that provide a competitive edge [18-20]. It is impossible to overstate the role that leadership plays in creating an atmosphere that is favourable to innovation. Successful leaders demonstrate the ability to communicate a compelling vision, provide consistent and unwavering support and allow the exchange of information among members of their teams. According to Mui, et al. [21] this action fosters a conducive atmosphere for developing innovative ideas. There is a lack of research on this link particularly in the unique context of VOEs despite recognizing the impact of leadership on the ability to innovate in more significant organizations [22]. This study aims to investigate the complex dynamics involved in analyzing the impact of different leadership styles on enhancing innovation capacities inside VOE organizations. Through this approach, the objective is to provide valuable perspectives that might enable VOEs to use the opportunities presented by innovation effectively which will lead to an improvement in their overall competitiveness and long-term viability.

Government policies and activities are crucial in influencing the environment for the development of enterprises. The interventions include a wide range of initiatives that cover several aspects, including financial aid, infrastructure development and capacity building within the realm of VOEs. The purpose of these activities is to enhance the effectiveness of VOEs which play a crucial role in driving economic growth in rural areas [23-25]. Nevertheless, the current corpus of studies has only provided a limited assessment of how government assistance influences the factors driving VOE's functioning in the economy. This study aims to examine the significant components of targeted government efforts and their impact on the link between the innovative capacities of VOEs and their overall performance. Through this endeavour, the paper's objective is to explore how governmental assistance might strengthen the capacity for innovation in VOEs ultimately resulting in heightened economic advancement and social influence within the localities in which they operate.

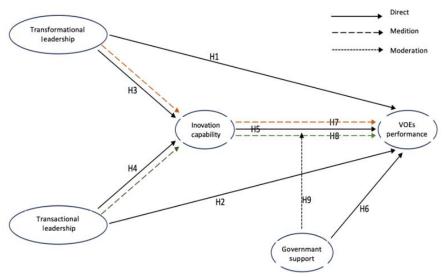
Organizational performance is multifaceted including various dimensions such as financial indicators, market effectiveness, stakeholder satisfaction and the attainment of strategic goals [26-28]. When considering VOEs, it is essential to analyze many aspects of their performance including their financial sustainability, potential to provide local employment opportunities, and more significant social effects on the community. Research has indicated that a company's capacity for innovation has a substantial influence on various facets of its performance [29, 30]. However, despite the findings mentioned earlier, there is a lack of research on converging these characteristics in VOEs. This study aims to examine the relationship between innovation skills and the financial sustainability and social performance of VOEs. Through this endeavour, the aim is to provide a comprehensive comprehension of the influence of innovation on the efficacy of these crucial economic establishments, acknowledging their function as facilitators for the advancement of rural economies.

In a nutshell, integrating various leadership styles, innovative capacities, governmental backing and organizational achievements constructs a coherent narrative that influences the course of VOEs. It is commonly known that certain theories of leadership, such as transactional and transformational leadership can promote creativity while upholding stability. In turn, the implementation of innovative practices has the potential to enhance the financial viability and expand the social effect of VOEs. Government assistance has a pivotal role in mediating the complex interplay of many circumstances, influencing these firms' eventual achievement. This study seeks to provide a scholarly contribution by using empirical research and theoretical perspectives to expand the understanding of VOEs and their significant role in facilitating positive transformations within rural landscapes in Indonesia.

#### 3. Research Methods

This section thoroughly examines the study's methodological aspects, including its objectives, research aims, research inquiries, literature evaluation, research site, population and sample, data collection, data analysis techniques and the authors' involvement. The basic structure of this research is presented in this comprehensive review. The study uses a quantitative methodology primarily emphasizing empirically examining and evaluating the associations among variables to evaluate particular theoretical frameworks. In order to assist the analysis, the use of research instruments is employed to measure variables quantitatively, hence making the data suitable for statistical methods [31]. The study's primary aim is to investigate the impact of independent factors on dependent variables including both direct and indirect impacts. We develop hypotheses designed to test these ideas and answer the research inquiries in order to accomplish this objective. The objectives of the study correspond with the causal research paradigm which identifies causal relationships between various factors.

The research framework below (see Figure 1) shows that the influence of government policy on innovation in Village-Owned Enterprises (VOEs) is a complex and multidimensional topic and empirical research provides in-depth information. It has been proven that these policies which include financial incentives, capacity-building programs, regulatory frameworks and knowledge-sharing initiatives serve as both facilitators and inhibitors of VOEs' ability to innovate. This study uses structural equation modelling (SEM) to clarify how policy, transactional leadership and transformational leadership relate to VOE innovation outcomes. This framework model can help clarify the complex relationships between policy components and leadership philosophies. This study aims to investigate the impact of transformational leadership which is represented by its focus on inspiring vision and empowerment on innovation capacity in VOEs using SEM.



**Figure 1.** Research concept framework.

The importance of transformational leadership in fostering a creative atmosphere is demonstrated by the fact that transactional leadership which places more emphasis on monitoring has not shown a comparable relationship. In addition, policies are analysed in this study with a focus on government initiatives to promote innovation by reducing bureaucracy and offering resources. This includes examining how some government policies unintentionally hinder innovation by

adopting complex legislation and inadequately funding initiatives. The available literature lacks thorough research that looks at the holistic and synergistic effects of different government policies, leadership philosophies and their interconnections on innovation within VOEs. Many of these studies are also context-specific. This study can close the gap and overcome the figure in the current research so that policymakers and stakeholders can gain a deeper understanding of the role of leadership and government policy in shaping innovation in VOEs. They can also receive guidance on empowering these businesses for rural development and economic growth.

Therefore, the technique addresses the following set of interconnected inquiries: What is the influence of transactional and transformational leadership styles on the success of VOEs? What is the function of innovative skills in moderating the link between leadership style and VOE performance? Furthermore, it is vital to examine the role of government backing as a moderating variable in the association between leadership style and the success of VOE initiatives. The literature review examines the theoretical underpinnings that constitute the basis of the study investigating the relationship between leadership styles and organizational success. Existing scholarly literature has clearly distinguished between transactional and transformational leadership styles. Transactional leadership places significant emphasis on supervision and the establishment of trade relationships.

In contrast, transformational leadership is defined by a visionary approach and the empowerment of individuals [15-17]. Furthermore, scholars such as Lawson and Samson [19]; Saunila and Ukko [20] and Saunila [29] acknowledge the significance of organizational innovation skills in generating value and maintaining long-term performance. Leadership is crucial in cultivating an environment conducive to innovation [21]. The influence of government assistance as shown in policies and initiatives is paramount in defining the environment conducive to the expansion of enterprises [25].

The geographical location of the study is East Java with a particular emphasis on VOEs occurring within the area. The selection of East Java as the study site was based on its notable concentration of VOEs in Indonesia making it an appropriate region for the investigation. East Java constituted around 14% of the aggregate number of registered Legal Entity VOEs within the nation of Indonesia highlighting its notable importance within the realm of VOEs on December 30, 2022. The study population consists of workers of VOEs in the East Java region who possess valid legal entity certifications. The East Java region has 1,643 validated and accredited VOEs on December 30, 2022. Sampling strategies are used in the study as a result of the large population size. Using sampling formulas, we determined the selection of 294 personnel from the VOEs.

Table 1 presents a comprehensive overview of the categorization of VOEs throughout six semesters distinguishing between beginner, middle and advanced levels of VOE existence. The data shows a consistent pattern whereby individuals with VOEs migrate from the beginner, middle and advanced levels as they advance in their journey pursuits. The data indicates a decline in the VOEs classified as beginner. The middle category shows constant expansion which may be attributed to the inherent evolution of VOEs from the beginner level to the middle level. The advanced category demonstrates a sustained pattern of expansion suggesting that a specific subset of advancements in VOE progresses from the middle level to the advanced level as time progresses. According to expected results, the data shows a positive pattern whereby VOEs advance over semesters to higher categorization levels.

**Table 1.** Development of village BUM in East Java province for 2019 – 2021.

	Total numbers of VOE's and classification status				
Description	Beginner VOE's	Middle VOE's	Advance VOE's	Total VOE's	
Semester I 2019	5,019	355	58	5,432	
Semester II 2019	4,970	881	58	5,909	
Semester I 2020	5,004	847	175	6,026	
Semester II 2020	3,296	2,285	537	6,118	
Semester I 2021	3,077	2,278	950	6,305	
Semester II 2021	3,044	2,291	1,028	6,363	

Data collection involved distributing questionnaires to participants who hold legal entity certifications and work for VOEs in East Java. Data-gathering approaches were used in this study: conducting direct trips to the field, administering paper questionnaires and using a Google Form for data collection. The term of data gathering was extended from January 1 to February 28, 2023. After conducting a thorough data-cleaning process to exclude incorrect replies, 294 legitimate respondents were discovered. The respondents had a balanced gender distribution with 47% identifying as male and 53% identifying as female. A significant proportion of participants belonged to the age bracket of 20 years and the majority had been employed at their respective VOEs for a duration exceeding one year. The educational backgrounds of the respondents showed a range of qualifications with a significant number having completed either senior high school or a bachelor's degree. Furthermore, the majority of participants originated from the nearby indigenous communities close to the sites of the VOEs.

The data collection methodology used in this study uses personality questionnaires, administered using personal questionnaires to gain detailed information on the research inquiries. The participants were given questionnaires that included statements on the variables being investigated. They were asked to assign ratings to these statements based on their judgments. The survey used a Likert scale where each item was rated on a five-point scale ranging from 1 to 5. Validity and reliability tests were performed on the data using the SPSS tool for data analysis. In this investigation, a total

of 294 samples were included and the use of standard tables and significant levels guided the analysis. The data analysis was conducted with the Partial Least Square (PLS) methodology applying the Smart PLS program. Multiple criteria were used to evaluate the suitability of the findings such as convergent validity, discriminant validity, composite reliability, average variance extracted (AVE) and Cronbach alpha.

The authors have developed the conceptual framework for the study (Figure 1), created the research inquiries and hypotheses, devised the questionnaires, gathered and processed the data, performed the data analysis and analyzed the findings. The authors have engaged in collaborative efforts throughout the research endeavour ensuring the study's methodological rigour and the validity of its results. The authors now proceed on to the section devoted to reporting the study's findings after providing a solid foundation for their selected research strategy. The authors discuss and analyse the investigation's findings in the next section related to the results providing important insights on the relationships between innovation abilities, government support, leadership styles and the effectiveness of VOEs in the particular Indonesian context. This analysis provides insight into how VOEs contribute to advancing rural economies.

## 4. Results and Discussion

The study uses smart PLS for data processing and analysis. *The outer model* defines how each block of statement items relates to its latent variables [32]. The outer model with reflexive statement items is evaluated using *convergent* and *discriminant validity* of the item statement and *composite reliability* for the item statement block.

**Table 2.** Cronbach's alpha and composite reliability.

Variables	Average variance extracted (AVE)
Government support (Z2)	0.533
Transformational leadership style (X1)	0.589
Transactional leadership style (X2)	0.502
Innovation capabilities (Z1)	0.557
VOE performance (Y)	0.531

Table 2 presents the AVE scores which demonstrate significant relationships between government support (Z2), transactional leadership style (X2), transformational leadership style (X1), innovation capabilities (Z1) and VOE performance (Y). The success of VOEs is enhanced by several factors including government assistance, transformational leadership, transactional leadership and innovative skills. Table 2 demonstrates the significant influence of governmental funding on the operating landscape of volunteer groups particularly those dedicated to environmental concerns. The AVE score of 0.533 for government support (Z2) suggests that this particular factor has a substantial role in accounting for the variability seen in the performance of VOEs. Hair, et al. [33]; Hair, et al. [34] and Hair, et al. [35] state that AVE values above 0.5 often indicate a robust relationship between the latent variable and its indicators. The empirical evidence indicates a positive relationship between government support and VOE performance suggesting that organizations that get significant support from the government tend to exhibit superior performance. Government assistance may take several forms such as providing financial help offering regulatory incentives and aligning policies.

This assistance enables VOEs to execute their objectives successfully enhancing performance outcomes. The effectiveness of transformational leadership in improving organizational performance has been extensively recognized [15, 36, 37]. The AVE score of 0.589 for the transformational leadership style (X1) indicates a significant correlation with the performance of VOEs. Transformational leaders are known for their ability to inspire and motivate their teams leading them to accomplish exceptional outcomes by fostering an environment that encourages innovation, creativity and the cultivation of a collective vision. The presence of a positive link between transformational leadership style and VOE performance suggests that companies that transformational leaders manage have a higher likelihood of achieving exceptional outcomes. These executives foster a culture of creativity and risk-taking among their teams in line with the objectives of VOE organizations.

Meanwhile, transactional leadership may be described as a leadership style that prioritizes the completion of every day activities and employs a system of incentives and punishments to motivate workers [15, 37]. The obtained AVE score of 0.502 for the transformational leadership style (X2) indicates that it significantly impacts the performance of VOEs but to a somewhat lower degree compared to transformational leadership. The correlation between transformational leadership style and VOE performance suggests that businesses led by transactional leaders have the potential to attain appropriate levels of performance. Transactional leaders play a crucial role in ensuring the efficient completion of tasks and the fulfilment of employee duties which is especially advantageous in effectively managing the daily operations of VOEs. Innovation skills are of utmost importance for businesses operating within the VOE sector enabling them to tackle emerging difficulties and develop sustainable solutions effectively. The AVE score of 0.557 for innovation capabilities (Z1) indicates a significant correlation with VOEs performance.

Organizations with robust innovation skills demonstrate the capacity to effectively respond to dynamic environments, cultivate pioneering ideas and sustain alignment with their core objectives. The significance of cultivating an inventive culture inside firms is shown by the positive relationship observed between innovation capabilities and VOE performance. This particular cultural business facilitates the ability of VOEs to discern novel prospects, effectively involve relevant parties and enhance their capacity to tackle business concerns more efficiently. In a nutshell, it is recommended that VOEs pursue governmental assistance, develop transformational and transactional leadership attributes and allocate resources

towards nurturing innovative skills inside their respective firms to optimize performance and achieve significant outcomes. VOEs may enhance their capacity to carry out their business objectives effectively and significantly impact the global economy, progressively prioritizing sustainability and business preservation by adopting this approach.

Ensuring the reliability of measuring equipment is essential in the field of organisational research. This study focuses on a reliability analysis of the crucial factors that impact the performance of VOEs. The primary emphasis is on the evaluation of internal consistency for several variables, namely government support (Z2), transformational leadership style (X1), transactional leadership style (X2), innovation capabilities (Z1) and VOEs performance (Y) through the use of Cronbach's alpha and composite reliability metrics. The constructs in question have high reliability and internal consistency levels as shown by their Cronbach's alpha and composite reliability ratings. This suggests that they are well-suited for study and analysis within the framework of VOEs. Researchers and policymakers may effectively use these constructs to get a deeper comprehension of the determinants that influence the performance of VOEs. This understanding can eventually facilitate the formulation of policies that provide support and foster the advancement of VOEs' contributions to business causes. The reliability measures presented in Table 3 serve as a robust basis for future research and analysis enabling a more precise evaluation of the associations between these constructs and their influence on the execution of VOEs' objectives.

**Table 3.** Reliability measurement.

Variables	Cronbach's alpha	Composite reliability
Government support (Z2)	0.919	0.931
Transformational leadership style (X1)	0.974	0.976
Transactional leadership style (X2)	0.924	0.934
Innovation capabilities (Z1)	0.971	0.973
VOE performance (Y)	0.901	0.918

Cronbach's alpha is a frequently used metric for assessing the dependability of internal consistency. The assessment evaluates the degree of correlation among items within a concept. A higher value of Cronbach's alpha indicates enhanced internal consistency and dependability levels. According to the provided data, the variable "government support (Z2)" has a noteworthy Cronbach's alpha coefficient of 0.919. This observation implies that the indicators used to assess government assistance inside VOEs show a significant degree of interrelatedness demonstrating robust internal coherence. The significance of a high Cronbach's alpha in this situation cannot be overstated as it indicates that the construct successfully encompasses the fundamental aspects of government support for VOEs. The transformational leadership style (X1) has a significantly elevated Cronbach's alpha coefficient of 0.974. This finding suggests that the scales used to assess transformational leadership styles have high internal reliability.

The considerable reliability score strengthens trust in using this construct to analyze its influence on the performance of VOEs. The transactional leadership style (X2) has noteworthy internal consistency as shown by a Cronbach's alpha coefficient of 0.924. The obtained score serves as evidence for the dependability of the construct in evaluating the transactional leadership style inside VOEs enabling a significant examination of its impact on performance. The innovation capability (Z1) has a high level of internal consistency as shown by its Cronbach's alpha coefficient of 0.971. The significant internal consistency observed suggests that the items used to assess innovative capacities exhibit strong reliability. Researchers may use this concept to investigate its impact on improving the performance of VOEs. VOEs (Y) performance demonstrates a Cronbach's alpha coefficient of 0.901. This score is still within an acceptable range even though it is lower than that of some other structures. The findings indicate that the measures used to evaluate the performance of training systems have a satisfactory degree of internal reliability thereby enabling significant investigations in this domain. In contrast, composite reliability is an additional metric used in the field of structural equation modelling (SEM) to assess internal consistency. The assessment of construct dependability is conducted by taking into account both the variances and covariances of the indicators. Greater values suggest more significant internal consistency similar to Cronbach's alpha. The composite reliability score for government support (Z2) is 0.931. This finding provides more evidence for the concept's validity and strengthens its importance in comprehending the impact of governmental funding on the functioning of VOEs. The transformational leadership style (X1) has a notable composite dependability score of 0.976 which signifies outstanding dependability in assessing the extent of transformational leadership within VOEs. The transactional leadership style (X2) has a solid internal consistency as shown by a composite reliability score of 0.934. This suggests that this construct is a reliable and valid measure of transactional leadership inside VOEs. The innovation capability (Z1) demonstrates a high level of composite dependability with a score of 0.973 indicating its dependability in assessing the innovation capabilities of VOEs. The VOEs performance (Y) construct has a commendable degree of internal consistency as shown by its composite reliability score of 0.918. This reliability score establishes VOE performance as a dependable measure for assessing the performance of VOEs.

**Table 4.** R square and R square adjusted.

Variables	R square	R squared adjusted
Innovation capabilities (Z1)	0.675	0.672
VOE performance (Y)	0.612	0.606

The capacity for innovation has become more vital within the dynamic realm of VOEs. Innovation is essential to these organisations' ability to adapt successfully to changing business needs and to maintain their influence and efficacy over time. This paper examines the relationship between innovation capabilities (Z1) and VOE performance (Y) through an analysis of the R-squared and modified R-squared values (see Table 4). The R-squared (R2) statistic is a statistical metric used to quantify the extent to which the variation in the dependent variable (VOE performance in this context) can be accounted for by the independent variable (innovation capabilities). The adjusted R-squared (R2 adjusted) is a revised variant of the R-squared metric that considers the number of predictors included in a model offering a more precise assessment of the model's ability to explain the observed data. The coefficient of determination (R-squared) for the relationship between innovation capabilities (Z1) and VOE performance (Y) is 0.675.

This finding suggests that innovation capabilities account for roughly 67.5% of the variation seen in VOE performance. The high R-squared value indicates a robust and statistically significant association between the two variables. In essence, the performance of VOEs in fulfilling their objective of environmental protection and preservation is significantly impacted by their innovation capabilities. The adjusted R-squared value of 0.672 suggests that this link remains solid and reliable even after considering the influence of the number of variables in the model. This finding indicates that the presence of innovation capabilities has a substantial and independent impact on the performance of VOEs reinforcing this association's credibility and reliability.

The results underscore the significant importance of innovation capabilities in VOEs. These talents involve an organization's ability to create, develop and execute creative solutions to tackle business concerns. Developing an innovative culture should be of utmost importance for VOEs as evidenced by the fact that over 66% of their success may be attributed to their innovative capability. VOE innovation can take many different forms such as the development of innovative conservation strategies and the application of modern technology for business monitoring. Furthermore, using novel fundraising and outreach tactics may also significantly improve performance by fostering incredible support and involvement from stakeholders. VOEs should allocate resources, provide training opportunities and implement initiatives to augment their innovative skills. This may include establishing specialized innovation teams, giving employees access to training programs focused on creative approaches and fostering partnerships with research institutions and industry counterparts to remain at the forefront of business progress.

Examining R-squared and modified R-squared coefficients indicates a strong and statistically significant correlation between innovation capabilities (Z1) and VOE performance (Y). The analysis reveals that a significant portion namely 67.5%, of the variability in VOE performance can be accounted for by innovation capabilities. This association remains robust even when accounting for other factors influencing VOE performance. These results highlight the significance of promoting and cultivating innovative capacities within VOEs. Through this action, these entities have the potential to significantly augment their efficacy, flexibility and general proficiency in their endeavour to safeguard and uphold the natural environment. This awareness should compel VOE to emphasize innovation more and allocate resources towards solutions that enable them to address business concerns with ingenuity and effectiveness. In the context of a dynamic and evolving global landscape, the need for organizations to engage in innovation transcends being a discretionary choice. It becomes an essential requirement to safeguard the planet's long-term viability.

Table 5 evaluates the impact of the transactional leadership style (X2) on VOEs performance (Y) and innovation capability (Z1) using the direct effect hypothesis test. There is a statistically significant and positive relationship between transactional leadership style and innovation capability as shown by a positive coefficient of 0.374 and a high T statistic of 5.225 (p-value < 0.001). This suggests that companies with a higher likelihood of enhanced innovation capabilities use transactional leadership approaches. However, the relationship between transactional leadership style (X2) and VOEs performance (Y) does not seem as vital. A weaker relationship between the variables is indicated by a negative coefficient of -0.095 and a T statistic of 1.952 (p-value = 0.052).

**Table 5.**Test the direct influence hypothesis.

Path coefficients	Original sample (O)	T statistics (O/STDEV)	P values
Transactional leadership style (X2) -> innovation capability (Z1)	0.374	5.225	0.000
Transactional leadership style (X2) -> VOEs performance (Y)	-0.095	1.952	0.052
Transformational leadership style (X1) -> innovation capability (Z1)	0.537	9.119	0.000
Transformational leadership style (X1) -> VOEs performance (Y)	0.007	0.133	0.894
Government support (Z2) -> VOEs performance (Y)	0.500	5.926	0.000
Innovation capability (Z1) -> VOEs performance (Y)	0.352	3.477	0.001
Moderating effect 1 -> VOEs performance (Y)	0.138	3.653	0.000

Table 5 also presents a statistically significant positive association between transformational leadership style and innovation capability. This is supported by a positive coefficient of 0.537 and a high T statistic of 9.119 (p-value < 0.001). Organizations under transformational leaders' guidance are more inclined to demonstrate elevated levels of innovative skills. In contrast, the coefficient of 0.007 accompanied by a T statistic of 0.133 (p-value = 0.894) suggests a lack of statistical significance in the association between transformational leadership style (X1) and VOEs performance (Y). This implies that transformational leadership has a good effect on the ability of organizations to innovate. It may not directly

impact the overall performance of VOEs. A positive coefficient of 0.500 and a high T statistic of 5.926 (p-value < 0.001) suggest a statistically significant positive association between government support and VOE performance.

This implies that firms that get significant government backing tend to exhibit improved performance by matching their activities with governmental aims and using available resources. The relationship between innovation capability (Z1) and VOE performance (Y) is examined. A positive coefficient of 0.352 accompanied by a T statistic of 3.477 (p-value = 0.001) indicates a statistically significant positive association between innovation capability and VOE performance. Organizations with robust innovation skills tend to attain superior effectiveness in safeguarding and maintaining the environment. The influence of moderating effect -1 on the performance of VOEs (Y) is assessed. A positive coefficient of 0.138 accompanied by a T statistic of 3.653 (p-value < 0.001) indicates a statistically significant positive moderating influence on VOE performance. This finding suggests that a moderating factor strengthens the relationship between several independent factors such as leadership styles, government backing and the performance of VOEs.

**Table 6** Test the indirect influence hypothesis.

Path coefficients	Original sample (O)	T statistics ( O/STDEV )	P values
Transformational leadership style $(X1)$ -> Innovation capability $(Z1)$ -> VOE performance $(Y)$	0.189	3.159	0.002
Transactional leadership style (X2) -> Innovation capability (Z1) -> VOE performance (Y)	0.132	2.923	0.004

The investigation based on the indirect influence hypothesis test ( see Table 6) starts by examining the relationship between the transformational leadership style (X1) and innovation capability (Z1) followed by its impact on VOEs performance (Y). The coefficient of 0.189 accompanied by a T statistic of 3.159 (p-value = 0.002) suggests a statistically significant and positive relationship between transformational leadership style and innovation capability. This implies that leaders who possess transformational attributes tend to cultivate an atmosphere favourable to innovation within the framework of VOEs. Moreover, the direct linkage between innovation capability (Z1) and VOE performance (Y) is not clearly shown in the table. It may be deduced as an integral component of the overarching association. The correlation between innovation capability and VOE performance is consistent with the concept that firms with higher innovation capabilities often achieve superior performance.

The current study focuses on the influence of transactional leadership style (X2) on VOE performance (Y) and innovation capability (Z1) similar to the previous trajectory. The obtained coefficient of  $0.132\,$  accompanied by a T statistic of  $2.923\,$  (p-value = 0.004) provides evidence of a statistically significant and positive association between transactional leadership style and innovation capability. This implies that transactional leaders make a favourable contribution to enhancing innovative skills inside VOEs.

The investigation results indicate that the transformational leadership style and transactional leadership style have a favourable impact on enhancing innovation capability within the framework of VOEs. These leadership styles promote innovation, problem-solving and adaptability in response to changing circumstances. Additionally, the observed positive relationship between innovation capability and VOE performance underscores the importance of innovation in facilitating enhanced performance. Organizations that allocate resources towards enhancing their innovation skills are more in clined to perform exceptionally well in fulfilling their objectives.

In a nutshell, the examination of the given data suggests that both the transformational and transactional leadership styles have a noteworthy and favourable influence on enhancing innovation capability among firms classified as VOEs. Moreover, the correlation between innovation capability and VOE performance highlights the need to cultivate innovation to improve a business's overall performance. The results underscore the significance of leadership in influencing the creative culture of VOE firms and propose that leaders who foster innovation positively contribute to achieving superior performance outcomes. Therefore, it is essential for VOE firms to acknowledge the significance of leadership in fostering innovation and include leadership development as a crucial element in their approach to enhancing performance and efficiently operating urban villages.

The results of this study indicated that the impact of the transformational and transactional leadership styles (X1) and (X2) on the performance of VOEs (Y) was not supported which contradicts the initial hypotheses (H1) and (H2). According to Larasdiputra, et al. [38] and Putranto and Wijayanti's [39] research, the lack of relevance of leadership style to performance may be attributed to the leader's limited involvement in the execution of tasks inside an organization. This may be attributed to standardized operating procedures (SOPs) that impose stringent regulations on work processes. Furthermore, it is plausible that informal power has a more substantial impact. According to Thoha [40] and Thoha [17] it is possible that informal power has a more significant effect. The existing research in this domain indicates that an increased level of authority granted to the director of the VOEs has the potential to contribute to the occurrence of this phenomenon. According to field circumstances, one of the potential explanations for the significant external impact of operational implementers (such as the village head and village deliberation) in decision-making processes inside VOEs might be attributed to this phenomenon. During the village deliberation, all stakeholders possess agency in determining the course of action for the operational execution of VOEs for the next twelve-month period.

The findings of the study suggest that there is a substantial relationship between transformational leadership style (X1), transactional leadership style(X2) and innovation capability (Z1) which is considered to be statistically significant. The

findings of this study indicate a substantial relationship between the leadership style of the director of the VOEs and their impact on innovative capacities. According to Saunila [29] and Saunila, et al. [30] enhancing innovation capability in micro, small and medium enterprises (MSMEs) relies on two fundamental factors. Firstly, the presence of a leadership culture that effectively guides and motivates employees towards innovation. This study defines such a culture through indicators of participatory leadership. Secondly, employees' engagement in activities fosters innovation within their respective organizations. According to Lawson and Samson [19] the incentive system is a very influential factor in promoting creative behaviour and facilitating the development of inventive habits. The results of field research indicate that both transformational and transactional leadership styles have the potential to foster the development of innovation capabilities by implementing program innovations by the director of VOEs or offering rewards directly linked to the activities. It is observed that the level of innovation capability within VOEs tends to increase as the frequency of rewards and incentives for innovation activities rises.

The analysis of the provided data offers important insights into the factors influencing VOE performance. The transactional leadership style has a considerably less noticeable impact on VOE performance. It favours innovative capabilities. The transformational leadership style has a significant impact on fostering innovation capability. However, its direct influence on overall performance may be limited. The performance of VOEs is greatly enhanced by government funding, underscoring the crucial role of external assistance. The relationship between innovation capability and VOE performance is favourable, underscoring the critical function of innovation capability. Furthermore, a moderating factor strengthens the relationship between the independent variables and VOE performance suggesting a multifaceted interaction among several components. This study highlights the importance of VOE organizations in finding a harmonious equilibrium between different leadership styles, actively seeking help from governmental entities, cultivating their capacity for innovation and considering moderating influences. These measures are crucial for optimizing the performance of VOEs and effectively tackling business concerns.

The effect of innovation capability (Z1) on the variable of VOEs performance (Y) is strengthened by government support (Z2). This observation demonstrates a favourable relationship between the level of government assistance and the performance of VOEs. According to Chang, et al. [41] the implementation of government incentives and development initiatives has a substantial impact on the performance of companies. Moreover, according to Mashigo and Kabir [42] the provision of financial assistance by the government catalyzes the expansion of small and medium-sized enterprises (SMEs) into the global market. This support can potentially enhance the overall performance of SMEs and play a substantial role in fostering economic development. According to Schaltegger, et al. [43] the provision of financial assistance by the government catalyzes the expansion of small and medium-sized enterprises (SMEs) into the global market. This support can potentially enhance the overall performance of SMEs and play a substantial role in fostering economic development. It has been observed that items with a higher score exhibit stronger associations with the policy aspect. This pertains to the government's role in establishing regulations that contribute to determining the legal status of VOEs and acting as a catalyst for their development. Additionally, implementing village deliberation as the main forum for decision-making in VOEs is supported by the government especially the village government. Furthermore, the government provides facilitation in terms of the necessary facilities and infrastructure to foster the growth of VOEs.

The study also indicates an acceptable relationship between innovation capability (Z1) and VOE (Y) performance. This criterion implies that there is a direct relationship between the level of innovation potential in VOEs and their ability to enhance performance. This condition suggests that interventions targeting the innovative skills of VOEs will have a more significant impact than efforts aimed at managing the leadership style of the director. The enhanced innovation capacity is expected to influence the future performance of VOEs substantially. According to Parthasarathy, et al. [28] strategic leadership innovation skills inside businesses enable them to maintain a competitive advantage by effectively capturing a significant market share by providing new products or services. Several instances of VOEs in East Java that align with the findings of Parthasarathy, et al. [28] as determined by monitoring and assessment undertaken by the Village Ministry Team, Kementerian Desa, Pembangunan Daerah Tertinggal, dan Transmigrasi (KDPDTT) in 2021 are as follows: 1) Gedongwetan VOEs in Malang Regency and 2) Bejo VOEs in Batu City. Amanah VOEs located in Malang Regency are the subject of discussion.

The result demonstrates a significant relationship between government support (Z2) and VOEs (Y) performance, thereby confirming its validity. VOEs may be seen as a manifestation of governmental policies designed to stimulate and enhance economic development in rural regions. The implementation of government assistance programs has been shown to have a significant impact on enhancing the operational effectiveness of small and medium-sized enterprises (SMEs) [44-46]. According to Chang, et al. [41] and Endah [47] the implementation of government incentives and development projects has a substantial impact on the performance of companies [41]. The encouragement and support of the government in promoting the formation and growth of VOEs aligns with the provisions outlined in Article 90 of Law Number 6 of 2014. According to Article 90, the government, provincial regional government, regency and city governments and village government are responsible for promoting the development of VOEs. Endah [47] argues that a balanced strategy is necessary for government participation in the development of VOE ensuring the appropriate involvement of the government, the market and the community. VOEs are regarded as a method to stimulate the local economy. This perspective aligns with Rogerson and Rogerson's [25] viewpoint on the emerging paradigm of Local Economic Development (LED).

This paradigm departs from a free market approach where community and market initiatives are solely entrusted to operate without significant government intervention towards a more balanced approach that incorporates the involvement of the community, the market and the government. VOEs may be seen as a manifestation of governmental policies

designed to stimulate economic growth within rural regions. The government has implemented many initiatives aimed at enhancing the involvement of VOEs in rural regions. These efforts have been primarily carried out by the ministry of villages, the development of disadvantaged regions and transmigration using a range of agencies and policy tools. The governance of the VOE organization has also been subject to regulation through various policy tools aimed at facilitating the improved functioning of VOEs.

This extensive study elucidates the complex interconnections between leadership styles, innovation capabilities, government backing and VOE performance. The impact of leadership styles on innovation capacity when mediated through innovation capability was found to have a significant effect on performance despite the lack of direct evidence to support these impacts. Furthermore, it has been shown that governmental backing augments the impact of innovation capacity on organizational performance, hence emphasizing the significance of external influences in bolstering overall performance. The findings offer significant insights for organizations and policymakers involved in VOEs. They underscore the significance of fostering innovation aligning leadership styles with innovation objectives and seeking governmental assistance to enhance performance outcomes within the realm of urban management at the village level. This study aims to analyze the intricate interaction of factors that impact the effectiveness of VOEs. The factors under consideration are leadership styles, innovative capabilities and government support. The hypotheses examined in this study provide valuable insights into the interrelationships and moderating impacts among these components as follows:

 $H_1$ : Transformational leadership style (X1) affects VOEs performance (Y). Rejected

H<sub>2</sub>: Transactional leadership style (X2) affects VOEs performance (Y).Rejected

Hypotheses 1 and 2 were rejected suggesting that neither transformational nor transactional leadership styles directly influence VOE performance. This outcome may initially appear counter intuitive but it underscores the complexity of factors in determining performance outcomes. Leadership styles are undoubtedly important, their direct impact on performance within the VOE context may be less pronounced than other factors.

 $H_3$ : Transformational leadership style (X1) affects innovation capability (Z1). Accepted

H<sub>4</sub>: Transactional leadership style (X2) affects innovation capability (Z1). Accepted

H<sub>5</sub>: Innovation capability (Z1) affects VOEs performance (Y). Accepted

Hypotheses 3, 4 and 5 were accepted. These findings highlight that transformational and transactional leadership styles positively influence innovation capability which significantly impacts VOEs performance. Leaders who foster innovation within their organizations contribute to better overall performance demonstrating the importance of a forward-thinking and adaptable approach in the VOE context.

 $H_6$ : Government support (Z2) affects the performance of VOEs(Y). Accepted

Hypothesis 6 was accepted indicating that government support does affect VOE performance. This suggests that organizations receiving substantial support from the government tend to perform better. Such support can take various forms including financial aid, policy alignment and regulatory incentives which empower VOE organizations to carry out their missions more effectively.

 $H_7$ : Innovation capability (Z1) mediates the influence of transformational leadership style (X1) on VOEs performance (Y) accepted with a P-value of 0.002.

 $H_8$ : Innovation capability (Z1) mediates the influence of transactional leadership style (X2) on VOEs performance (Y) accepted with a P-value of 0.004.

H<sub>9</sub>: Government support (Z2) can moderate the effect of innovation capability (Z1) on VOEs performance (Y) received strengthening with a P-value of 0.000.

Hypotheses 7 and 8 were supported suggesting that the presence of innovation capability plays a mediating role in the relationship between transformational and transactional leadership styles and the performance of VOE initiatives. This study proposes that leadership styles indirectly influence performance by affecting the organization's capacity to innovate. Hypothesis 9 was obtained indicating that government support may moderate the influence of innovation capability on VOE performance. This implies that the influence of a firm's capacity to innovate on its performance is enhanced when there is government assistance. The convergence of inventive capacities and governmental support has the potential to generate more advantageous results for VOEs.

## 5. Conclusion

The study enhances the existing knowledge on the interrelationships between leadership styles, innovation capacities, government assistance and organizational success in the context of Village-Owned Enterprises in Indonesia. The integration of visionary leadership with innovative solid skills has been identified as a powerful combination for fostering the development of these crucial economic institutions. Additionally, the role of government assistance is crucial in facilitating and enhancing this connection. The identified results include both theoretical and practical ramifications. The paper contributes to the existing literature by offering empirical data on the influence of leadership and innovation on the success of small-scale organizations such as VOEs from a theoretical standpoint. This statement highlights the importance of visionary leadership and the capacity of innovation to bring about significant change. The study provides significant insights that might be useful to policymakers and managers in volunteer engagement and organization from a pragmatic standpoint. This statement underscores the significance of specific government assistance in bolstering the capacity for innovation and as a result, the overall effectiveness of VOEs. This study emphasizes the importance of visionary leadership for VOE managers in cultivating innovation which subsequently contributes to enhanced financial sustainability and community impact.

The paper's findings indicate a clear and substantial impact of leadership styles on the innovative capacities of VOEs.

The effectiveness of building an innovation-friendly workplace was especially evident in leadership styles that exhibit vision and empowerment sometimes referred to as transformational leadership styles. Transformational leaders are known for their ability to inspire and motivate their people, fostering an environment that encourages innovation and forward thinking. The impact of transactional leadership which prioritizes monitoring and transactional exchanges to maintain order and efficiency was shown to have a limited effect on the innovative capacity of VOEs. This emphasizes the significance of visionary leadership in fostering creativity consistent with other studies conducted in broader organizational settings.

Additionally, this paper revealed a noteworthy relationship between the capacity for innovation and the overall success of VOEs. This discovery further supports the concept that maintaining a steady innovation capacity leads to concrete advantages—such as financial viability and a more extensive societal influence. Organizations with solid innovation skills are better well-positioned to effectively respond to dynamic environments, stimulate economic development—and benefit their respective communities. This assertion is consistent with the existing body of work that explores the significant impact of innovation on organizations' overall effectiveness and success.

Government assistance has been identified as crucial in mitigating the correlation between innovation capabilities and VOE performance. The regulatory framework which includes regulations, financial aid and capacity-building programs, significantly impacts the success of VOEs. The implementation of these specific interventions offers essential assistance for VOEs to augment their capacity for innovation and improve their overall performance. This discovery underscores the need for governmental dedication and financial allocations to enhance these crucial economic establishments particularly in rural regions. One of the key findings derived from the study is the intermediary function performed by innovative capabilities. The study revealed that the performance of VOEs was influenced by different leadership styles with the extent of this influence being moderated by the organization's innovation potential. Visionary leadership's performance may be limited since its influence is mainly mediated through its effect on the organization's ability to innovate. This statement highlights the crucial significance of innovation in connecting leadership with organizational achievement. This project aims to enhance the capacity of VOEs as active catalysts for promoting equitable economic development in rural areas. The authors enhance the understanding of these crucial economic institutions and their capacity to foster positive transformations in the rural areas of Indonesia through a comprehensive analysis of leadership, innovation, government assistance and performance.

#### 5.1. Implications

This study has several significant implications. It emphasizes how vital visionary leadership is to fostering innovation in Village-Owned Enterprises (VOEs). Innovation abilities together with visionary leadership are a potent formula for success in these kinds of economic entities. The study also emphasizes how vital government support is in fostering and strengthening the relationship between innovation, leadership and organizational success. This gives empirical evidence on the impact of innovation and leadership on small-scale organizations such as VOEs highlighting the significance of visionary leadership which has theoretical implications. The results are pertinent to policymakers and managers of VOEs highlighting the significance of targeted government support in enhancing innovation capability and the general efficacy of VOEs in promoting rural development and economic expansion.

# 5.2. Limitations

Although the study offers insightful information, there are several issues with it. Initially, the study is carried out within the framework of VOEs in Indonesia which can restrict the applicability of the results to other areas or categories of institutions. Furthermore, the study may have overlooked the possible significance of other leadership philosophies since it mainly concentrates on visionary and transactional leadership philosophies. Furthermore, the results are constrained by the data gathered and the technique used, just as in any empirical study. It is essential to take these limitations into account when interpreting the findings and using them in various situations.

### 5.3. Future Study

Future research in this field may take various directions. Initially, it would be advantageous to carry out comparative research in other nations or areas to investigate the transferability of the connection between innovative leadership styles, government support and VOE performance. This may be used to pinpoint geographical differences and particular policy environments that affect organizational performance and creativity. Moreover, the study indicates that inventive capacities mediate the link between organizational success and leadership styles. Future studies may delve deeper into comprehending the particular processes and elements that underpin this mediation in order to offer a more detailed view of how leadership styles affect creativity. Lastly, investigating the possible contribution of other leadership philosophies not addressed in this study might deepen our comprehension of the connection between innovation and leadership in VOEs and related establishments.

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