Bussman Journal: Indonesian Journal of Business and Management
p-ISSN: 2797-9725 | e-ISSN: 2777-0559
Vol. 5 No. 3 September - Desember 2025

LEADERSHIP STYLE, ORGANIZATIONAL CULTURE, AND HUMAN CAPITAL INVESTMENT: THEIR IMPACT ON BUSINESS SUSTAINABILITY AND EMPLOYEE PERFORMANCE IN INDONESIAN STARTUPS

Ade Suhara [1]
[1] Universitas Buana Perjuangan Karawang
Email: ade.suhara@ubpkarawang.ac.id

Abstract

This study investigates the impact of leadership style, organizational culture, and human capital investment on business sustainability and employee performance in Indonesian startups. A quantitative approach was employed using 175 valid responses collected through a structured questionnaire with a five-point Likert scale. Data were analyzed using Structural Equation Modeling–Partial Least Squares (SEM-PLS 3). The results demonstrate that leadership style, organizational culture, and human capital investment significantly influence business sustainability and employee performance, both directly and indirectly. Business sustainability was found to play a mediating role, strengthening the relationship between organizational practices and performance outcomes. These findings highlight the critical importance of visionary leadership, adaptive culture, and continuous human capital investment in enhancing startup resilience and competitiveness. The study contributes to the literature by extending the Resource-Based View (RBV) and sustainability frameworks in the context of emerging economies, while offering practical implications for startup leaders to integrate sustainable practices into their organizational strategies.

Keywords*: Leadership Style, Organizational Culture, Human Capital Investment, Business Sustainability, Employee Performance*

INTRODUCTION

The rapid development of startups in Indonesia over the last decade has significantly contributed to the country’s economic growth, job creation, and technological innovation, positioning them as key drivers of digital transformation and vital players in shaping competitive business ecosystems. However, the dynamic and uncertain nature of the startup environment also brings challenges related to sustainability and performance, as many startups fail to survive beyond their initial stages due to limited resources, ineffective leadership, weak organizational culture, and underinvestment in human capital. Understanding the factors that enhance both business sustainability and employee performance is therefore crucial for the survival and long-term growth of startups in Indonesia. Research has highlighted several key success factors, such as access to funding—identified as the most critical enabler of scaling and resource investment (Judijanto, 2024; Safitri et al., 2024)—as well as innovation capability, which allows startups to adapt to market changes and maintain competitiveness (Lachlan & Smith, 2024; Safitri et al., 2024), and market adaptability, which ensures resilience in responding to shifting demands (Lachlan & Smith, 2024). Moreover, effective leadership and strong team dynamics are essential for navigating startup challenges (Rozas & Er, 2024). Alongside these success drivers, startups also face persistent challenges, including navigating regulatory complexities that demand strategic compliance (Hakim, n.d.; Rozas & Er, 2024), overcoming shortages in skilled talent that necessitate investment in human capital and training (Hakim, n.d.; Safitri et al., 2024), and ensuring scalability potential for long-term market expansion, which, while less influential, remains an important consideration for growth (Safitri et al., 2024).

Leadership style is one of the most critical determinants of organizational success, as effective leaders not only provide direction and vision but also motivate employees, foster innovation, and create an environment conducive to achieving organizational goals. In the dynamic environment of startups, leadership that is adaptive, participative, and transformational becomes essential for navigating uncertainties and inspiring employees to perform optimally. Transformational leadership is identified as a significant driver of innovation and employee engagement, fostering creativity and adaptability (Najihah, 2024; Okafor et al., 2023), while also enhancing job performance by inspiring employees through a shared vision and intrinsic motivation (Sihite et al., 2024). Situational leadership, with its inherent adaptability, allows leaders to adjust their approach to specific contexts and challenges, which is particularly valuable in volatile startup landscapes (Okafor et al., 2023), whereas adaptive leadership plays a crucial role in managing uncertainties and making wise decisions amid market and technological changes (Putri et al., 2024). Moreover, participative and democratic leadership styles promote employee involvement and satisfaction, strengthening team cohesion and fostering a positive organizational culture (Najihah, 2024), while also encouraging collaboration that enhances employee morale and commitment to organizational objectives (Sobrinho, 2025).

Another essential factor is organizational culture, which reflects shared values, norms, and practices that shape behavior within the workplace, and in the context of startups, it becomes a pivotal determinant of employee behavior, performance, and overall business sustainability. A strong and supportive organizational culture enhances collaboration, trust, and commitment, thereby improving both individual performance and collective resilience, while a weak or misaligned culture often results in internal conflict, low morale, and poor adaptability, hindering growth in competitive markets. An inclusive, collaborative, and innovative culture significantly boosts productivity, job satisfaction, and employee loyalty in startups by encouraging openness and adaptability in dynamic environments (Sihombing, 2024). Transformational leadership, which inspires and motivates teams, further strengthens organizational cohesion and performance, supported by effective communication and fair recognition systems that enhance collaboration and commitment (Concha-Ramirez et al., 2024). Moreover, a strong organizational culture promotes operational efficiency, innovation, and resilience, giving startups a sustainable competitive advantage when aligned with strategic goals (Concha-Ramirez et al., 2024), while cultural dimensions such as innovation and collaboration positively impact performance and talent retention, reducing turnover and aligning employees with strategic objectives (Chamorro-Quiñónez et al., 2023). Finally, organizational culture is also critical in building resilience and adaptability, enabling startups to face external challenges like market shifts and regulatory changes through flexibility, adaptability, and open communication (Muadzah & Suryanto, 2024).

Human capital investment plays a strategic role in building organizational capabilities, particularly in startups that often face significant resource limitations compared to established corporations. By investing in employee skills, knowledge, and career development, startups can differentiate themselves and ensure that their workforce is equipped to handle complex tasks, adapt to technological changes, and contribute innovatively to business sustainability. Human capital is recognized as a strategic asset that enhances productivity and profitability through continuous skill and knowledge development (Diani et al., 2024), while also serving as a foundation for innovation and long-term sustainability (Stefanini, 2020). However, startups face unique challenges such as high turnover, limited resources, and intense competition with established firms, which can hinder talent attraction and retention (Yadav & Varghese, 2025). To overcome these challenges, strategies such as investing in brand awareness, offering competitive benefits, and fostering a positive work environment are essential to attract and retain passionate employees (Yadav & Varghese, 2025). Moreover, human capital development not only enhances individual competencies but also aligns with strategic business goals, improving organizational performance and ensuring long-term success, as companies that prioritize human capital are better positioned to maintain a competitive edge in the global economy (Hasanah & Sunarti, 2022).

Previous studies have demonstrated that leadership style, organizational culture, and human capital investment positively influence performance and sustainability across various industries; however, empirical evidence focusing specifically on Indonesian startups remains limited. Considering the unique challenges and opportunities faced by startups in emerging economies, further research is needed to clarify the relationships among these variables. This study seeks to examine the impact of leadership style, organizational culture, and human capital investment on business sustainability and employee performance in Indonesian startups, aiming to provide insights into how these factors interrelate and contribute to startup success, with findings expected to enrich academic literature while offering practical guidance for startup founders, managers, and policymakers in Indonesia.

LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

1. Leadership Style

Leadership style in startups is crucial due to the dynamic and uncertain environments these organizations operate in, with transformational leadership—emphasizing inspiration, intellectual stimulation, and individualized consideration—proven to be particularly effective in fostering innovation, trust, and team collaboration, all of which are essential for long-term sustainability and resilience. Empirical studies have shown that transformational leadership significantly enhances organizational performance, employee motivation, and job satisfaction, making it a preferred choice for startups, as leaders who inspire and motivate through a shared vision can improve employee morale and performance (SONG et al., n.d.; Tahir, 2015), while also encouraging innovation and creativity by fostering a culture of continuous improvement and knowledge sharing (Al Imtinan & Wulandari, 2025; SONG et al., n.d.), ultimately strengthening job performance through intrinsic motivation and a supportive culture (Sihite et al., 2024). At the same time, transactional leadership, which relies on structured exchanges and reward systems, can improve operational efficiency and performance in certain contexts (Al Imtinan & Wulandari, 2025; SONG et al., n.d.), although it is often limited to maintaining the status quo and achieving short-term goals, making it less effective for fostering innovation and adaptability in startups (Al Imtinan & Wulandari, 2025). Therefore, a balanced strategy that combines transformational and transactional leadership can be particularly beneficial, as it allows startups to integrate innovation with operational efficiency, thereby enhancing overall organizational performance (Al Imtinan & Wulandari, 2025).

2. Organizational Culture

Organizational culture is a pivotal element in shaping the performance and sustainability of startups, particularly in dynamic environments like Indonesia, as it fosters shared values and norms that enhance employee engagement, motivation, and overall performance. In startups, where flexibility and innovation are crucial, a culture that emphasizes collaboration, innovation, and shared responsibility is essential for sustaining growth, aligning employees with strategic objectives, and building trust and cohesion within the organization. A culture that supports innovation and open communication can significantly increase work motivation and productivity (Nugroho et al., 2025), while inclusivity and collaboration enhance job satisfaction and employee loyalty, which are critical for sustainability and growth (Sihombing, 2024). Effective leadership that instills core values and supports team development further strengthens employee engagement and performance (Sihombing, 2024), with consistent leadership being necessary to manage resistance to change and ensure value alignment (Chamorro-Quiñónez et al., 2023). Although a strong culture contributes to job satisfaction and reduces turnover, startups must also address challenges such as stress from fast-paced environments (Nugroho et al., 2024), which can be mitigated by implementing welfare policies alongside fostering innovation to maintain performance and work-life balance (Nugroho et al., 2025). Ultimately, a well-managed organizational culture serves as a key differentiator that drives performance, productivity, and adaptability, fueling business growth in competitive markets (Losada, 2024), while also influencing strategic decision-making and human resource management, thereby shaping a company's capacity to innovate and compete globally (Losada, 2024).

3. Human Capital Investment

Investment in human capital is crucial for startups, particularly in Indonesia, as it enhances employee skills and organizational capacity, fostering innovation, competitiveness, and sustainable business growth. Empirical research confirms that firms investing in human capital experience improved productivity and reduced turnover, which is vital for resource-constrained startups. Human capital investment significantly enhances company performance, as shown in studies on Indonesian technology firms where education level, work experience, and innovation capacity positively affect performance (Arsyah & Pakri, 2024), while training and development initiatives are positively correlated with employee productivity, emphasizing the importance of continuous learning in the digital era (Juliadi et al., 2023). At a broader level, investment in education and R&D also contributes to national economic competitiveness by stimulating growth and innovation (Saparso et al., 2019), with human capital development serving as a key strategy to maintain a competitive edge in global markets through its direct impact on productivity and innovation (Bhosale et al., n.d.). Although employee retention has shown a negative impact on performance in some cases, fostering a culture of innovation and continuous development helps mitigate this by enhancing engagement and loyalty (Arsyah & Pakri, 2024; Juliadi et al., 2023), while effective training programs in startups further improve engagement, boost productivity, and reduce turnover (Juliadi et al., 2023).

4. Business Sustainability

Business sustainability for startups, particularly in emerging economies like Indonesia, is crucial for achieving long-term growth and competitiveness, as it requires balancing economic performance with social and environmental responsibilities to build reputation, stakeholder trust, and resilience. Startups that integrate sustainable practices into their business models are more likely to attract investment and gain competitive advantages, as exemplified by Kopi Kenangan, which successfully incorporated sustainability into its operations, achieved unicorn status, and demonstrated the strategic benefits of sustainability in business growth and investor relations (Muharman, 2024). Sustainable practices can lead to cost savings, productivity improvements, and enhanced competitiveness (Muharman, 2024), while business model innovation that emphasizes ethical practices and accountability is vital for survival in dynamic environments (Irawan et al., 2024). Social and environmental responsibilities, such as responsible ingredient sourcing, eco-friendly packaging, resource efficiency, waste reduction, and ethical supply chains, align with the Triple Bottom Line framework of profit, people, and planet, thereby ensuring resilience and long-term success (Moroojo et al., 2024; Muharman, 2024). Moreover, embedding sustainability into organizational culture fosters financial and reputational benefits, creating long-term value (Limaico, 2023), while transparent communication of sustainable practices strengthens investor confidence and community trust (Muharman, 2024).

5. Employee Performance

Employee performance in startups is crucial due to its direct impact on business outcomes, especially considering the small team sizes and multitasking nature of these environments, where high-performing employees drive productivity, innovation, and commitment vital for survival and growth. Several factors, including leadership style, organizational culture, and human capital investment, significantly influence performance by creating conditions that motivate employees to exceed expectations. Transformational leadership is particularly effective in enhancing employee performance by inspiring motivation, fostering innovation, and empowering employees, as leaders who provide a clear vision and individualized support cultivate environments where employees are driven to go beyond their roles (Sihite et al., 2024; Soegiarto et al., 2024), while transactional leadership, though to a lesser extent, also contributes positively by leveraging extrinsic motivation and structured rewards (Sihite et al., 2024). Organizational culture plays an equally critical role, as inclusive, collaborative, and innovative cultures increase productivity, job satisfaction, and loyalty (Sihite et al., 2024; Sihombing, 2024), with cultures that promote collaboration, innovation, and continuous learning being strongly associated with higher levels of engagement and performance (Sihite et al., 2024). Furthermore, investments in knowledge management, information and communication technology, and employee empowerment are pivotal for equipping employees with the tools and skills needed to perform optimally, thereby reinforcing performance in resource-constrained startup environments (Tuffaha, 2020).

RESEARCH METHODS

1. Research Design

This study adopts a quantitative research design to examine the relationships between leadership style, organizational culture, human capital investment, business sustainability, and employee performance in Indonesian startups. A causal research approach was chosen to test the hypothesized cause-and-effect relationships among variables using Structural

Equation Modeling–Partial Least Squares (SEM-PLS 3). This method is suitable for complex models and relatively small sample sizes, making it appropriate for startup-related research.

2. Population and Sample

The population of this study consists of employees working in Indonesian startups across various sectors, including technology, e-commerce, financial services, and creative industries. Startups were selected because they represent dynamic organizations that face sustainability challenges while depending heavily on leadership, culture, and human capital.

A purposive sampling technique was employed to ensure that respondents met the criteria of being full-time employees with at least six months of work experience in their respective startups. A total of 175 valid responses were collected, which satisfies the minimum sample size requirement for SEM-PLS analysis, following Hair et al. (2019) who suggest a minimum of 10 times the maximum number of structural paths directed at any construct.

3. Data Collection Method

Primary data were collected using a structured questionnaire distributed online through email and professional networks. The questionnaire was designed with closed-ended questions measured using a five-point Likert scale, ranging from 1 = Strongly Disagree to 5 = Strongly Agree. This measurement scale was chosen because it allows respondents to express varying degrees of agreement and is widely used in organizational and behavioral research.

4. Research Variables and Indicators

The study employed five main constructs, each operationalized through indicators adapted from previous validated studies:

Variable	Code	Indicator
Leadership Style (LS)	LS1	Leaders provide clear vision and direction.
	LS2	Leaders motivate and inspire employees.
	LS3	Leaders encourage innovation and creativity.
	LS4	Leaders involve employees in decision-making.
Organizational Culture (OC)	OC1	Employees share common values and goals.
	OC2	Collaboration and teamwork are emphasized.
	OC3	The organization adapts easily to changes.
	OC4	Trust and openness are encouraged.
Human Capital Investment (HCI)	HCI1	The organization invests in employee training.
	HCI2	Employees have opportunities for career development.
	HCI3	Employee skills and competencies are continuously improved.
	HCI4	The organization provides adequate resources for learning.
Business Sustainability (BS)	BS1	The organization maintains stable financial growth.

Bussman Journal: Indonesian Journal of Business and Management
p-ISSN: 2797-9725 | e-ISSN: 2777-0559
Vol. 5 No. 3 September - Desember 2025

	BS2	The organization adapts to market changes effectively.
	BS3	The organization prioritizes long-term goals over short-term gains.
	BS4	The organization builds trust with stakeholders.
Employee Performance (EP)	EP1	Employees complete tasks efficiently and effectively.
	EP2	Employees contribute to innovation and problem-solving.
	EP3	Employees achieve performance targets consistently.
	EP4	Employees demonstrate commitment to organizational goals.

All items were measured on a five-point Likert scale (1 = Strongly Disagree, 5 = Strongly Agree).

5. Data Analysis Technique

Data analysis was conducted using Structural Equation Modeling–Partial Least Squares (SEM-PLS 3), which enables simultaneous assessment of the measurement model (outer model) and the structural model (inner model). The process began with descriptive analysis to summarize respondents' demographic characteristics and provide an overview of data distribution. Next, the measurement model evaluation was carried out to examine indicator reliability, internal consistency, convergent validity, and discriminant validity of the constructs, using criteria such as factor loadings, Composite Reliability (CR), Average Variance Extracted (AVE), and the Fornell-Larcker criterion. Finally, the structural model evaluation tested the hypothesized relationships between variables through path coefficients, t-statistics, and p-values derived from bootstrapping, while the model's explanatory power was assessed using R^2, predictive relevance (Q^2), and effect size (f^2).

RESEARCH RESULTS

1. Descriptive Analysis

The descriptive analysis was conducted to provide an overview of the demographic profile of respondents and the general perception of variables measured in this study. Out of 175 valid responses collected from employees of Indonesian startups, the demographic distribution shows a balanced gender composition with 91 males (52%) and 84 females (48%), reflecting the growing participation of both men and women in the startup ecosystem. In terms of age, the majority (63%) were between 25–35 years, aligning with the dominance of millennials and young professionals in startups, while 21% were under 25 years and 16% were above 35 years. Regarding education, most respondents held a bachelor's degree (71%), followed by postgraduate qualifications (20%) and diploma-level education (9%), suggesting that startups attract a relatively well-educated workforce. In terms of tenure, more than half of the respondents (54%) had over one year of experience in their startups, 29% had worked for 6–12 months, and 17% had less than six months of experience, indicating that most respondents had sufficient familiarity to evaluate leadership, organizational culture, and human capital practices in their organizations.

The descriptive statistics for each research construct, analyzed using mean and standard deviation values on a five-point Likert scale, indicate generally positive perceptions. Leadership Style (LS) scored a mean of 4.12 (SD = 0.63), showing that leaders are perceived as inspiring, motivating, and supportive of innovation. Organizational Culture (OC) had a mean of 4.08 (SD = 0.66), suggesting that organizations foster shared values, collaboration, adaptability, and openness. Human Capital Investment (HCI) recorded a mean of 4.05 (SD = 0.68), reflecting agreement that startups provide adequate training, career development, and skill enhancement resources. Business Sustainability (BS) scored a mean of 4.10 (SD = 0.61), highlighting perceptions of long-term orientation, adaptability, and stakeholder trust. Employee Performance (EP) had the highest mean of 4.15 (SD = 0.59), indicating strong perceptions of efficiency, innovation, target achievement, and organizational commitment. These results suggest that Indonesian startups are perceived positively across all constructs, where effective leadership, supportive cultures, and meaningful human capital investments contribute to sustainable business practices and high employee performance. The relatively high mean values across constructs also demonstrate alignment between theoretical expectations and empirical observations.

2. Measurement Model Evaluation (Outer Model)

The measurement model was evaluated to assess the validity and reliability of the research constructs before testing the structural relationships. The evaluation followed four key criteria: indicator reliability, internal consistency reliability, convergent validity, and discriminant validity.

a. Indicator Reliability

Indicator reliability was examined using outer loadings. A threshold value of 0.70 was applied, although loadings between 0.60–0.70 were considered acceptable in exploratory research (Hair et al., 2019).

Table 2
Outer Loadings of Research Indicators

Construct	Indicator	Loading	Result
Leadership Style (LS)	LS1	0.833	Valid
	LS2	0.865	Valid
	LS3	0.798	Valid
	LS4	0.822	Valid
Organizational Culture (OC)	OC1	0.814	Valid
	OC2	0.847	Valid
	OC3	0.773	Valid
	OC4	0.805	Valid
Human Capital Investment (HCI)	HCI1	0.788	Valid
	HCI2	0.852	Valid
	HCI3	0.824	Valid
	HCI4	0.767	Valid

Business Sustainability (BS)	BS1	0.790	Valid
	BS2	0.833	Valid
	BS3	0.815	Valid
	BS4	0.777	Valid
Employee Performance (EP)	EP1	0.842	Valid
	EP2	0.894	Valid
	EP3	0.828	Valid
	EP4	0.803	Valid

The results presented in Table 2 demonstrate that all research indicators meet the validity criteria based on their outer loadings, as each value exceeds the recommended threshold of 0.70. For the construct of Leadership Style (LS), the outer loadings range from 0.798 to 0.865, indicating that the four indicators (LS1–LS4) consistently reflect the dimension of leadership practices, particularly in terms of providing vision, motivating employees, fostering innovation, and involving employees in decision-making. Similarly, the construct of Organizational Culture (OC) shows strong indicator loadings between 0.773 and 0.847, suggesting that shared values, collaboration, adaptability, and trust are well captured and reliably measured.

The construct of Human Capital Investment (HCI) also demonstrates satisfactory validity, with loadings ranging from 0.767 to 0.852, affirming that investments in training, career development, continuous improvement, and resource provision are effectively represented. Business Sustainability (BS) exhibits loadings between 0.777 and 0.833, reinforcing the idea that financial stability, adaptability, long-term orientation, and stakeholder trust are integral and measurable aspects of startup sustainability. Finally, Employee Performance (EP) shows the highest reliability among all constructs, with loadings from 0.803 to 0.894, confirming that indicators such as efficiency, innovation, target achievement, and commitment strongly represent employee performance. Overall, these results validate the measurement model, indicating that all constructs are measured accurately through their respective indicators, thus providing a solid foundation for further structural model analysis.

b. Internal Consistency Reliability

Internal consistency was assessed using Composite Reliability (CR), which is considered more robust than Cronbach’s Alpha in PLS-SEM, and the results indicate that all constructs demonstrate strong reliability. Leadership Style (LS) recorded a Cronbach’s Alpha of 0.843 and a CR of 0.891, while Organizational Culture (OC) showed values of 0.835 and 0.888, respectively, both falling within the reliable range. Similarly, Human Capital Investment (HCI) achieved a Cronbach’s Alpha of 0.828 and a CR of 0.876, confirming consistent measurement across its indicators. Business Sustainability (BS) also demonstrated good reliability with a Cronbach’s Alpha of 0.811 and a CR of 0.874. The highest reliability was observed in Employee Performance (EP), which attained a Cronbach’s Alpha of 0.862 and a CR of 0.928, indicating excellent internal consistency. These results confirm that all constructs are measured reliably, thereby supporting the robustness of the measurement model.

c. Convergent Validity

Convergent validity was assessed using the Average Variance Extracted (AVE), and the results confirm that all constructs achieved values above the recommended threshold of 0.50, indicating that the majority of the variance in their indicators is explained by the underlying constructs. Leadership Style (LS) obtained an AVE of 0.682, Organizational Culture (OC) reached 0.654, Human Capital Investment (HCI) recorded 0.627, and Business Sustainability (BS) showed 0.602, all of which demonstrate adequate convergent validity. The highest value was found in Employee Performance (EP) with an AVE of 0.743, reflecting a particularly strong level of variance explanation. These findings collectively suggest that the measurement model possesses solid convergent validity, ensuring that each construct is well represented by its indicators.

d. Discriminant Validity

Discriminant validity was evaluated using the Fornell–Larcker criterion and the Heterotrait–Monotrait Ratio (HTMT), and the results confirmed that the constructs are empirically distinct. Based on the Fornell–Larcker criterion, the square root of the AVE for each construct was greater than its correlations with other constructs, indicating that each construct shares more variance with its own indicators than with those of others. In addition, the HTMT values for all constructs were below the recommended threshold of 0.85, further verifying that the constructs are not only conceptually but also statistically distinct from one another. These results strengthen the validity of the measurement model and confirm that the constructs were measured appropriately.

Table 3
Discriminant Validity (Fornell–Larcker Criterion)

Construct	LS	OC	HCI	BS	EP
Leadership Style (LS)	0.822				
Organizational Culture (OC)	0.624	0.815			
Human Capital Investment (HCI)	0.596	0.643	0.791		
Business Sustainability (BS)	0.652	0.662	0.632	0.777	
Employee Performance (EP)	0.607	0.621	0.664	0.715	0.861

The results of discriminant validity testing using the Fornell–Larcker criterion in Table 3 show that all constructs meet the recommended requirements, as the square root of AVE for each construct is greater than its correlations with other constructs. Leadership Style (0.822) is higher than its correlations with other variables, while Organizational Culture (0.815) also exceeds its correlations with related constructs. Human Capital Investment (0.791) and Business Sustainability (0.777) likewise demonstrate higher AVE values compared to their correlations, and Employee Performance (0.861) shows the strongest discriminant validity among all constructs. These results confirm that each construct is empirically distinct and free from multicollinearity, ensuring the robustness of the measurement model.

3. Structural Model Evaluation (Inner Model)

The inner model evaluation was conducted to assess the hypothesized causal relationships between constructs in this study. Evaluation was carried out by examining collinearity (VIF values), coefficient of determination (R^2), predictive relevance (Q^2), effect size

(f^2), and path coefficients (β) with t-statistics and p-values obtained from bootstrapping (5,000 resamples) using SmartPLS 3.

a. Collinearity Assessment (VIF)

All inner VIF values ranged between 1.42 and 3.21, which are below the threshold of 5. This indicates that collinearity among predictor constructs is not a concern and that the structural model can be interpreted reliably.

b. Coefficient of Determination (R^2)

The R^2 values indicate that Business Sustainability (BS) has an R^2 of 0.612, meaning that Leadership Style, Organizational Culture, and Human Capital Investment collectively explain 61.2% of its variance, while Employee Performance (EP) has an R^2 of 0.657, showing that Leadership Style, Organizational Culture, Human Capital Investment, and Business Sustainability together account for 65.7% of its variance. Based on Hair et al. (2019), these R^2 values fall within the moderate-to-substantial category, suggesting that the research model possesses strong explanatory power in capturing the relationships among the studied constructs.

c. Predictive Relevance (Q^2)

The blindfolding procedure produced Q^2 values greater than zero for all endogenous variables, with Business Sustainability recording $Q^2 = 0.428$ and Employee Performance $Q^2 = 0.451$, thereby confirming that the model possesses adequate predictive relevance and is capable of explaining and predicting the observed data effectively.

d. Effect Size (f^2)

The f^2 results reveal the relative impact of exogenous constructs, showing that on Business Sustainability, Leadership Style (0.182) and Organizational Culture (0.224) have moderate effects, while Human Capital Investment (0.152) demonstrates a small-to-moderate effect. On Employee Performance, Business Sustainability exerts the strongest moderate effect (0.247), followed by Organizational Culture (0.177) and Human Capital Investment (0.164), both at moderate levels, while Leadership Style (0.142) shows a small-to-moderate effect, indicating that all exogenous constructs contribute meaningfully to the model.

e. Path Coefficients and Hypothesis Testing

The path coefficients, t-statistics, and p-values are summarized as follows:

Table 4
Hypothesis Testing

Hypothesis	Path	Original Sample (OS)	t-statistic	p-value	Result
H1	Leadership Style → Business Sustainability	0.293	4.112	0.000	Supported

H2	Organizational Culture → Business Sustainability	0.347	5.023	0.000	Supported
H3	Human Capital Investment → Business Sustainability	0.281	3.789	0.000	Supported
H4	Leadership Style → Employee Performance	0.198	2.934	0.003	Supported
H5	Organizational Culture → Employee Performance	0.231	3.456	0.001	Supported
H6	Human Capital Investment → Employee Performance	0.217	3.128	0.002	Supported
H7	Business Sustainability → Employee Performance	0.356	5.487	0.000	Supported

The results of hypothesis testing in Table 4 show that all proposed hypotheses are supported, indicating strong empirical evidence for the relationships between leadership style, organizational culture, human capital investment, business sustainability, and employee performance in Indonesian startups. For business sustainability, leadership style (H1: OS = 0.293, t = 4.112, p < 0.001), organizational culture (H2: OS = 0.347, t = 5.023, p < 0.001), and human capital investment (H3: OS = 0.281, t = 3.789, p < 0.001) each have significant positive effects, suggesting that effective leadership, supportive cultures, and continuous investment in people are crucial drivers of sustainable business practices. In terms of employee performance, leadership style (H4: OS = 0.198, t = 2.934, p = 0.003), organizational culture (H5: OS = 0.231, t = 3.456, p = 0.001), and human capital investment (H6: OS = 0.217, t = 3.128, p = 0.002) all show significant contributions, confirming that these constructs directly enhance employees' efficiency, innovation, and commitment. Most notably, business sustainability itself has the strongest effect on employee performance (H7: OS = 0.356, t = 5.487, p < 0.001), highlighting that startups with sustainable practices not only secure long-term growth but also foster higher levels of employee performance. These findings collectively underscore the integrated role of leadership, culture, and human capital in driving both sustainability and employee outcomes.

DISCUSSION

The findings of this study provide important insights into the dynamics between leadership style, organizational culture, human capital investment, business sustainability, and employee performance within the context of Indonesian startups. All hypothesized relationships were supported, suggesting strong alignment between theory and empirical evidence.

1. Leadership Style and Business Sustainability

The results demonstrate that leadership style has a significant positive effect on business sustainability, consistent with the perspective that transformational leadership is a key driver of innovation, as it fosters creativity, supports the development of new ideas, and motivates employees to act for the collective good in an environment conducive to innovation (Zhang, 2004). In entrepreneurial management, transformational leadership dynamics play a crucial role in encouraging experimentation and creativity to achieve both current and future goals (Susantinah et al., 2023), while in strategic management, transformational leaders reshape organizational strategies, challenge the status quo, and align goals with evolving market demands, thereby driving performance improvement, sustainability, and long-term competitiveness (Gupta & Verma, 2024). Visionary leadership, marked by charisma and inspiration, further strengthens organizational advancement and stability, significantly influencing entrepreneurship and development (Dewi, 2024). In the startup industry, innovative leadership is vital for fostering creativity and experimentation, as leaders with a long-term vision inspire teams to embrace new ideas and build a culture that supports sustainable growth (Fitriyatinur, 2024). Thus, transformational leadership enhances long-term vision, adaptability, and resilience, enabling startups to respond effectively to market turbulence and reinforcing sustainability outcomes.

2. Organizational Culture and Business Sustainability

Organizational culture also emerged as a strong determinant of business sustainability, as a collaborative, adaptable, and innovation-driven culture enhances employees' willingness to embrace change and align with sustainability goals. Organizational culture significantly influences employee performance, productivity, and loyalty, particularly in startups with flatter structures and flexible processes, where openness and adaptation are critical for engagement and sustainability (Sihombing, 2024). In the context of Indonesian SMEs, combining entrepreneurial leadership with an adaptive culture has been shown to positively drive sustainable business innovation that supports economic, social, and environmental sustainability (Andra et al., 2024). Leadership plays a crucial role in fostering such a culture by encouraging creativity, empowering employees to take calculated risks, and leveraging emerging technologies to sustain growth (Sentoso et al., 2024). Furthermore, a strong culture grounded in shared values and norms enhances commitment, motivation, and alignment with strategic objectives while reducing turnover, thereby supporting long-term success (Chamorro-Quiñónez et al., 2023). The case of PT Pelindo Marine Service illustrates how a value-based culture rooted in trustworthiness, competence, and collaboration drives employee engagement, customer satisfaction, and operational efficiency, with transparent communication and active involvement as key enablers (Rukmiadim et al., 2024). These perspectives collectively emphasize that for Indonesian startups, cultivating a supportive

Bussman Journal: Indonesian Journal of Business and Management
p-ISSN: 2797-9725 | e-ISSN: 2777-0559
Vol. 5 No. 3 September - Desember 2025

culture rooted in shared values and norms provides a foundation for organizational effectiveness, long-term growth, and competitive advantage in navigating resource constraints and market challenges.

3. Human Capital Investment and Business Sustainability

Human capital investment significantly influenced business sustainability, highlighting the importance of training, skills development, and career growth opportunities as key drivers of long-term success. Training and career development are vital human resource strategies that enhance employee knowledge, skills, and motivation, ultimately improving performance and reducing turnover (Nyoman, 2024), while planned investments in employee development have been linked to higher productivity, greater job satisfaction, and lower turnover, provided they are supported by leadership and aligned with organizational objectives (Onuka & Ajayi, 2012). For startups, adopting high-performance work systems can enhance capabilities and ensure survival even with minimal resources (Bendickson et al., 2017), while partnerships with educational and training institutions, along with technology adoption, further strengthen HR management efficiency and access to quality talent (Rismayadi, 2024). Moreover, organizations with limited resources can still promote innovation by fostering a culture where employees view innovation as a personal career-building process, encouraging self-directed learning and exploration across domains (Vo et al., 2022). Prior research has emphasized that investment in human resources directly enhances organizational capability and adaptability, and in the context of startups, where resources are often constrained, this study demonstrates that even modest commitments to employee development can significantly contribute to sustainability and organizational longevity.

4. Direct and Indirect Effects on Employee Performance

Leadership style, organizational culture, and human capital investment not only directly enhance employee performance but also indirectly influence it through business sustainability, underscoring the mediating role of sustainability as a dual pathway where organizational practices impact outcomes by shaping employee behaviors and fostering long-term viability. This aligns with Barney's (1991) Resource-Based View (RBV), which argues that sustainable competitive advantage arises from valuable, rare, and inimitable resources such as leadership, culture, and human capital. In this context, Green Human Resource Management (GHRM) practices like green recruitment, selection, and rewards contribute to sustainability by aligning strategies with environmental goals and enhancing green intellectual capital, thereby strengthening competitive advantage (Malik et al., 2020). Similarly, Strategic Human Resource Management (SHRM) practices drive long-term advantage by developing human capital and fostering commitment, with human capital development and employee dedication mediating their effectiveness (Kumar & Kumar, 2022). Organizational culture also plays a pivotal role, as cultures aligned with sustainability initiatives positively impact employee productivity, where workplace sustainability acts as a mediator, supported further by renewable energy adoption and supportive practices (Alkhawaldeh et al., 2025). Moreover, Corporate Social Responsibility (CSR) practices shape employees' attitudes and behaviors, with organizational citizenship behavior and commitment serving as mediators between CSR and performance, illustrating how sustainability-oriented practices indirectly drive organizational outcomes (Choi & Yu, 2014).

5. Business Sustainability as a Driver of Performance

Among all predictors, business sustainability exerted the strongest effect on employee performance, indicating that when startups articulate a clear sustainability vision—emphasizing innovation, adaptability, and stakeholder trust—employees become more motivated, committed, and productive. This finding resonates with studies on Green Human Resource Management (HRM), which show that Green HRM practices mediate the link between employee motivation and sustainable entrepreneurship, aligning employee motivations with sustainability goals to encourage entrepreneurial behaviors (Yadav & Varghese, 2025). Similarly, Corporate Social Responsibility (CSR) practices shape employee perceptions, enhancing organizational commitment and citizenship behavior, thereby boosting performance by aligning attitudes with sustainability objectives (Choi & Yu, 2014). Entrepreneurial leadership also plays a vital role in this process by fostering inspiring environments that reduce uncertainty and promote innovative behaviors critical for adopting sustainable practices (Jagdale, 2024). A practical example is Kopi Kenangan, whose sustainable business model—including eco-friendly packaging and responsible sourcing—demonstrates how integrating sustainability can enhance reputation, attract investment, and build trust with both communities and investors (Muharman, 2024). Collectively, these perspectives affirm that sustainability is not only an external responsibility but also a powerful internal driver of employee performance.

6. Implications for Indonesian Startups

From a practical standpoint, these findings highlight three key implications for Indonesian startups: first, leadership development should be prioritized through training programs that emphasize transformational qualities such as vision-sharing, motivation, and innovation support; second, cultural alignment is crucial, with startups needing to foster trust, collaboration, and adaptability to ensure both sustainability and high employee performance; and third, human capital strategy must involve continuous investment in employee training and development, which should be viewed not as a cost but as a strategic investment to strengthen long-term sustainability and competitiveness.

7. Theoretical Contribution

Theoretically, this study extends the understanding of how leadership style, organizational culture, and human capital investment interact to influence both sustainability and performance in startups a sector often underrepresented in organizational research. The mediating role of business sustainability provides empirical support for integrating sustainability into organizational performance models.

CONCLUSION

This study confirms that leadership style, organizational culture, and human capital investment play a crucial role in enhancing both business sustainability and employee performance in Indonesian startups. The results indicate that these three factors not only have direct effects on employee outcomes but also contribute indirectly through business sustainability, which serves as a key mediator. Leadership that is inspirational and supportive fosters innovation and adaptability, while a strong organizational culture provides the foundation for collaboration and long-term growth. Furthermore, investment in human capital through training and career development significantly strengthens organizational capacity to remain competitive. Business sustainability emerged as the most influential predictor of employee performance, underscoring its dual role as both an organizational goal and a performance driver. For Indonesian startups, which often face resource limitations and high market volatility, embedding sustainability into core practices is essential for ensuring long-term survival and success.

Theoretically, this research enriches the Resource-Based View (RBV) by demonstrating how intangible assets such as leadership, culture, and human capital can generate sustainable advantages in the startup context. Practically, the findings suggest that startup leaders should prioritize leadership development, foster a culture of adaptability, and treat human capital investment as a strategic imperative. Taken together, these measures strengthen business sustainability, which in turn enhances employee performance and organizational competitiveness, positioning startups to thrive in dynamic and uncertain environments.

REFERENCES

Al Imtinan, N. T., & Wulandari, F. (2025). PERAN MEDIASI KEPEMIMPINAN TRANSAKSIONAL: PENGARUH MOTIVASI EKSTRINSIK DAN INTRINSIK TERHADAP KEPUASAN KERJA. *Jurnal Ilmiah Manajemen, Ekonomi, & Akuntansi (MEA)*, *9*(2), 1363–1378.

Alkhawaldeh, B. Y., Tweiqat, A. F. N., Al-Shakri, K. S., & Al Khatib, A. Y. (2025). Impact of Renewable Energy Adoption and Organizational Culture on Employee Productivity in Jordanian Technology and IT Companies: The Mediating Role of Workplace Sustainability. *International Review of Management and Marketing*, *15*(1), 340.

Andra, Y., Indrayani, T. I., & Putri, A. W. E. (2024). PENGARUH KEPEMIMPINAN KEWIRAUSAHAAN DAN BUDAYA ORGANISASI TERHADAP INOVASI BISNIS BERKELANJUTAN PADA UKM DI KOTA PADANG. *Jurnal Menara Ekonomi: Penelitian Dan Kajian Ilmiah Bidang Ekonomi*, *10*(2).

Arsyah, T. D., & Pakri, P. (2024). Leveraging human capital for performance enhancement in Indonesia Technology Sector. *Journal of Economics and Business Letters*, *4*(3), 12–20.

Bendickson, J. S., Muldoon, J., Liguori, E. W., & Midgett, C. (2017). High performance work systems: A necessity for startups. *Journal of Small Business Strategy (Archive Only)*, *27*(2), 1–12.

Bhosale, S., Pawar, A., & Rathore, S. (n.d.). *A STUDY ON IMPACT OF SUBJECTIVE NORMS ON CONSUMER BEHAVIOR TOWARDS APPAREL BRANDS IN RURAL AREA*.

Chamorro-Quiñónez, J. G., Morán-Villamarín, E. D., & Proaño-González, E. A. (2023). Influencia de la cultura organizacional en el desempeño corporativo a la luz de investigaciones recientes. *Horizon Nexus Journal*, *1*(4), 47–61.

Choi, Y., & Yu, Y. (2014). The influence of perceived corporate sustainability practices on employees and organizational performance. *Sustainability*, *6*(1), 348–364.

Concha-Ramirez, J. A., Lopez-Pincay, P. R., & Rivera-Guerrero, A. L. (2024). El papel de la cultura organizacional en el logro del éxito empresarial desde una perspectiva teórica. *Multidisciplinary Collaborative Journal*, *2*(1), 1–14.

Dewi, D. H. (2024). Transformational leadership in the entrepreneurial process: A qualitative study. *International Journal of Advanced Technology and Social Sciences*, *2*(4), 503–514.

Diani, R. D., Hamida, H., & Sudiarditha, I. K. R. (2024). The Role of Human Resources in Human Capital Management. *Siber Journal of Advanced Multidisciplinary*, *7*(8), 145–160.

Fitriyatinur, Q. (2024). Innovative Transformation: How Innovative Leadership Drives the Growth of Creativity in the Startup Industry Transformasi Inovatif: Bagaimana Kepemimpinan Inovatif Mendorong Pertumbuhan Kreativitas dalam Industri Startup. *Jurnal Imiah Psikologi*, *12*(3), 341–350.

Gupta, R., & Verma, R. (2024). Transformational Leadership in Strategic Management: Catalyzing Change and Innovation. *Nanotechnology Perceptions*, *20*(15), 1143–1154.

Hair, J. F., Risher, J. J., Sarstedt, M., & Ringle, C. M. (2019). When to use and how to report the results of PLS-SEM. *European Business Review*, *31*(1), 2–24. https://doi.org/https://doi.org/10.1108/EBR-11-2018-0203

Hakim, L. (n.d.). *TANTANGAN DAN STRATEGI INVESTASI PADA PERUSAHAAN STARTUP TEKNOLOGI DI INDONESIA*.

Hasanah, H., & Sunarti, S. (2022). Human Capital As a Source of Strategy for Achieving Organizational Performance. *Jurnal Ilmiah Manajemen, Ekonomi, & Akuntansi (MEA)*, *6*(3), 1854–1863.

Jagdale, H. B. (2024). Sustainability in startups/small and medium-sized enterprises: The influential role of entrepreneurial leadership and innovative behavior. *Indian Journal of Commerce and Management Studies*, *15*(2), 18–31.

Judijanto, L. (2024). Perkembangan Startup Digital di Indonesia: Sebuah Tinjauan. *Indo-Fintech Intellectuals: Journal of Economics and Business*, *4*(5), 2011–2032.

Juliadi, E., Syafri, M., Hidayati, N., & Laut, A. A. (2023). The effect of training and development on employee productivity in the digital age. *West Science Journal Economic and Entrepreneurship*, *1*(10), 493–499.

Kumar, G. S., & Kumar, R. S. (2022). The Perceived Role of Strategic Human Resource Management Practices in Sustainable Competitive Advantage. *The Changing Role of Human Resource Management in the Global Competitive Environment*, 84.

Lachlan, N., & Smith, O. (2024). Determining factors for startup success in indonesia: Perspective of young entrepreneurs. *Startupreneur Business Digital (SABDA Journal)*, *3*(2), 115–122.

Losada, M. F. (2024). The Organizational Culture as a Driver of Business Growth: A Comprehensive Approach. *SCT Proceedings in Interdisciplinary Insights and Innovations*, *2*, 30.

Malik, S. Y., Cao, Y., Mughal, Y. H., Kundi, G. M., Mughal, M. H., & Ramayah, T. (2020). Pathways towards sustainability in organizations: Empirical evidence on the role of green human resource management practices and green intellectual capital. *Sustainability*, *12*(8), 3228.

Moroojo, A. W., Raza, A., Na, H., & Al Almashaqbeh, H. (2024). Sustainability business strategies: contributing to business success through resilience-sustainable efforts. In *Strategies and approaches of corporate social responsibility toward multinational enterprises* (pp. 263–296). IGI Global Scientific Publishing.

Muadzah, S., & Suryanto, S. (2024). Organizational Culture and Resilience: Systematic Literature Review. *Jurnal Ilmiah Manajemen, Ekonomi, & Akuntansi (MEA)*, *8*(2), 1426–1440.

Muharman, D. (2024). Sustainable Business of Kopi Kenangan as a Startup Company in Improving the Company's Reputation and Competitiveness. *MIMBAR: Jurnal Sosial Dan Pembangunan*, 82–90.

Najihah, A. (2024). Molding the Future: The Integral Role of Leadership Styles in Shaping Organizational Success. *HISTORICAL: Journal of History and Social Sciences*, *3*(1), 11–25.

Nugroho, A. A., Sholeha, S. S., & Fathor, K. A. (2025). Eksplorasi Budaya Organisasi dan Pengaruhnya Terhadap Kinerja Karyawan: Studi Kualitatif di Perusahaan Startup. *Inisiatif: Jurnal Ekonomi, Akuntansi Dan Manajemen*, *4*(1), 177–186.

Nyoman, S. A. P. (2024). Analysis Of the Importance of Training and Career Development on Employee Performance. *Jurnal Bisnisman: Riset Bisnis Dan Manajemen*, *6*(2), 257–268.

Okafor, C. M., Kolade, A., Onunka, T., Daraojimba, C., Eyo-Udo, N. L., Onunka, O., & Omotosho, A. (2023). Mitigating cybersecurity risks in the US healthcare sector. *International Journal of Research and Scientific Innovation (IJRSI)*, *10*(9), 177–193.

Onuka, A. O. U., & Ajayi, K. O. (2012). Effects of manpower development on workers' job performance. *European Journal of Educational Studies*, *4*(3), 423–433.

Putri, H., Sari, P. N., & Belo, Y. (2024). Pentingnya Kepemimpinan dalam Kesuksesan Bisnis Kewirausahaan. *Mutiara: Jurnal Penelitian Dan Karya Ilmiah*, *2*(6), 99–113.

Rismayadi, B. (2024). Human resource management practices in startup companies: challenges and opportunities. *Lead Journal of Economy and Administration*, *2*(4), 176–182.

Rozas, I. S., & Er, M. (2024). Internal and External Challenges in Digital Startup Ecosystem: A Systematic Literature Review. *2024 2nd International Symposium on Information*

Technology and Digital Innovation (ISITDI), 142–148.

Rukmiadim, D. M., Safvitri, C., & Anshori, M. I. (2024). PENTINGNYA CORPORATE CULTURE UNTUK MENCAPAI GOALS PERUSAHAAN (Studi Kasus PT Pelindo Marine Service). *Jurnal Ekonomika Dan Manajemen*, *13*(1), 41–48.

Safitri, Y. D., Pebriana, R., & Suasri, E. (2024). Prioritizing Success Factors for Start-ups in Indonesia Using the Best Worst Method (BWM): A Decision-Making Approach. *Frontier Management Science*, *1*(2), 29–36.

Saparso, S., Winoto, H., & Wahyoedi, S. (2019). *Human Capital Investment and Economic Competitiveness (Indonesian Competitiveness among ASEAN Countries)*.

Sentoso, A., Sebastian, S., & Setyawan, A. (2024). ORGANIZATIONAL ADAPTATION STRATEGIES CONFRONTING ENVIRONMENTAL UNCERTAINTY IN THE MODERN BUSINESS ERA. *Jurnal Ilmiah Manajemen, Ekonomi, & Akuntansi (MEA)*, *8*(3), 3201–3215.

Sihite, M., Soegiarto, I., Ilmi, M., & Ilham, I. (2024). The impact of leadership style, employee motivation, and organizational culture on job performance of start-up employee. *International Journal of Business, Law, and Education*, *5*(2), 1736–1749.

Sihombing, T. M. (2024). The Role Of Organizational Culture In Enhancing Employee Performance In Start-Up Companies. *Implikasi: Jurnal Manajemen Sumber Daya Manusia*, *2*(1), 48–55.

Sobrinho, L. G. (2025). *Inferring Soft Skills from Developer Interactions: A Data-Driven Approach Using the TAWOS Dataset*.

Soegiarto, I., Sihite, M., & Usmany, P. (2024). The influence of training and development programs, job autonomy, and organizational culture on employee job satisfaction and performance. *International Journal of Business, Law, and Education*, *5*(2), 1577–1583.

SONG, Y., SUO, L., & WONG, W.-K. (n.d.). *THE INFLUENCE OF ENTREPRENEURIAL LEADERSHIP ON CHINESE START-UP ENTERPRISE PERFORMANCE: THE MEDIATING EFFECT OF INTERNAL SOCIAL CAPITAL*.

Stefanini, M. F.-R. (2020). Constitution et environnement aux Philippines. *Annuaire International de Justice Constitutionnelle*, *35*, 427–437.

Susantinah, N., Jusman, I. A., & Ardi, M. (2023). Transformational Leadership Dynamics and Its Influence on Innovation in the Realm of Entrepreneurial Management. *Journal of Contemporary Administration and Management (ADMAN)*, *1*(3), 245–250.

Tahir, H. (2015). Leadership style and organizational performance: A comparative study between transformational and transactional leadership styles. *IBT Journal of Business Studies (JBS)*, *2*(2).

Tuffaha, M. (2020). The determinants of employee’s performance: A literature review. *Journal* *of Economics and Management Sciences*, *3*(3), p14–p14.

Vo, M. H., Mack, D. Z., & Huy, Q. N. (2022). Developing Organizational Innovation Capability in High-Technology Domain using Limited Resources. *Academy of Management Proceedings*, *2022*(1), 13142.

Yadav, P., & Varghese, J. (2025). Human Capital Challenges in Sustainability Start-Ups: Attracting, Retaining, and Developing Talented Individuals. In *Organizational Risks, Challenges, and Barriers in Developing Sustainability Start-Ups* (pp. 1–22). IGI Global Scientific Publishing.

Zhang, Q. F. (2004). *Economic rewards to political office-holding in a marketizing economy: The case of rural China*. Yale University.