JURNAL ECONOMINA e-ISSN: 2963-1181
Volume 5, Number 10, October 2026
Homepage: ejournal.45mataram.ac.id/index.php/economina

From Leadership To Performance: the Influence of Entrepreneurial Leadership on Business Performance Based on the Balanced Scorecard Perspective Among Generation Z Entrepreneurs in Indonesia

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Article History
Received: 06-09-2026
Revised: 11-10-2026
Published: 30-10-2026

ABSTRACT

Generation Z entrepreneurs show a strong interest in building businesses, yet many experience business performance instability due to limited managerial experience. Entrepreneurial leadership is therefore considered a strategic factor that may enhance business management capabilities, decision-making efficiency, and performance sustainability. The relationship between Entrepreneurial Leadership and Business Performance among Generation Z entrepreneurs in Indonesia is examined in this study. A quantitative cross-sectional design was employed, involving 254 Gen Z entrepreneurs selected through purposive sampling. Entrepreneurial leadership was measured using the theoretical framework proposed by Gupta et al. (2004), and business performance was assessed using the Balanced Scorecard dimensions. Questionnaire data were analyzed using simple linear regression to assess the effect of Entrepreneurial Leadership on Business Performance. The analysis revealed a positive and statistically significant effect, as indicated by the regression coefficient ($\beta = 0.608$), t-value of 12.074, and significance level below 0.001. These findings provide empirical evidence of the role of entrepreneurial leadership in supporting business performance among Generation Z entrepreneurs in Indonesia. Business performance may also be influenced by various other factors beyond the model examined in this study. The findings may serve as a basis for mentoring programs, training, and development strategies aimed at strengthening entrepreneurial leadership, improving business performance, and supporting business sustainability among young entrepreneurs.

Keywords: ***Entrepreneurial leadership, Business performance, Generation Z entrepreneurs, Balanced Scorecard***

INTRODUCTION

Entrepreneurship is one of the key factors contributing to economic growth and social transformation across countries, including Indonesia (Dini Aulya et al., 2024). MSMEs constitute a major component of Indonesia's economy, with more than 64 million businesses

contributing approximately 60% of national GDP and providing employment for around 97% of the workforce. These figures were reported by the Coordinating Ministry for Economic Affairs of the Republic of Indonesia (Kemenko Perekonomian Republik Indonesia, 2025), emphasizing the important position of entrepreneurship within the national economy.
Among the working-age population, Generation Z, born between 1997 and 2012, has emerged as one of the most prominent groups in this development. Generation Z is characterized by creativity, adaptability, and proficiency in utilizing digital media across various business activities (Lubis et al., 2022). The Asia Pacific Young Entrepreneur Survey indicated that 66% of Generation Z in the Asia-Pacific region, including Indonesia, have strong aspirations to establish their own businesses (Lubis & Handayani, 2023).

Generation Z demonstrates a strong interest in starting businesses across various sectors, including culinary, fashion, beauty care, and other creative industries. A total of 93% of Generation Z have begun exploring business ownership, while 84% consider entrepreneurship the most attractive career option among 12 occupational choices, with the primary motivation being the pursuit of work-life balance, which they perceive as more attainable through entrepreneurship (BINUS & ZenBusiness Survey, 2024). As digital natives, Generation Z possesses high levels of creativity and the ability to access and utilize technology for business innovation, providing them with significant potential to establish and develop businesses, including through startup development and the use of digitalization to explore new market opportunities (Sari & Soelaiman, 2025). However, limited managerial experience may make businesses led by Generation Z less stable in operational management, financial management, and decision-making, despite their strong creativity and adaptability (Bagheri, 2017). This condition makes achieving business performance an increasingly crucial issue for Generation Z entrepreneurs, who are entering their productive years and contributing to the growth of Indonesia's entrepreneurial ecosystem. In the context of Generation Z entrepreneurship, business performance measurement has distinct characteristics because many of these entrepreneurs are still in the early stages of establishing their businesses. They must navigate rapidly changing market dynamics driven by developments in the digital era while also adapting to innovations and shifts in business platforms. Therefore, a comprehensive understanding of business performance is essential. The high level of entrepreneurial interest among Generation Z needs to be accompanied by the ability to manage these challenges effectively to ensure optimal business performance.

Business performance refers to the extent to which a business achieves its operational and strategic objectives. It encompasses two main aspects: financial and non-financial performance. Startups need to manage and integrate both aspects to support business development (Seo & Lee, 2019). Financial aspects are generally measured through sales growth, profitability, and market share, while non-financial aspects include service quality, customer loyalty, operational efficiency, and innovation capability (Miller, 1987). Financial performance is generally associated with a company's short-term sustainability, whereas non-financial performance more strongly reflects long-term and sustainable growth (Nguyen et al.,

2021). During the early stages of business development, financial performance is often considered more crucial than non-financial performance (Choi et al., 2018). The Balanced Scorecard approach broadens the scope of business performance assessment to four perspectives: the Financial Perspective, Customer Perspective, Internal Business Process Perspective, and Learning and Growth Perspective (Kaplan & Norton, 1996).

The challenges Generation Z faces in achieving optimal business performance indicate that business success depends not only on strategy or market conditions but also on leaders' ability to direct teams, make decisions, and capitalize on opportunities. Therefore, leadership capacity represents an important factor that may determine whether business performance can be achieved consistently. In this context, Entrepreneurial Leadership emerges as a potentially important factor influencing the Business Performance of Generation Z entrepreneurs in Indonesia.

Entrepreneurial Leadership describes the ability of leaders to help business units adapt, foster innovation, and identify new opportunities in unstable environments (Gupta et al., 2004). Entrepreneurial Leadership is influenced by individual characteristics such as self-confidence, creativity, and intuition, as well as cognitive abilities to navigate uncertainty, social experiences in building commitment and trust, and rapidly changing environmental dynamics. The cast enactment dimension includes building commitment and specifying limits, which relate to how leaders align goals, establish boundaries, and set work rules. Meanwhile, the scenario enactment dimension encompasses framing the challenge, absorbing uncertainty, and path-clearing, representing leaders' abilities to formulate challenges, cope with uncertainty, and remove obstacles to support goal achievement (Gupta et al., 2004). The ability to influence and guide others in identifying, developing, and pursuing business opportunities is also an integral part of Entrepreneurial Leadership (Renko et al., 2015). Leaders with entrepreneurial characteristics tend to think creatively, remain flexible in responding to change, and foster innovation within their business environments, making these capabilities particularly important for young entrepreneurs (Bagheri, 2017). Entrepreneurial Leadership also catalyzes fostering innovative behavior and enhancing organizational effectiveness (Paudel, 2019). Previous research on Entrepreneurial Leadership has demonstrated its positive relationship with Business Performance and organizational outcomes. Entrepreneurial Leadership has been found to enhance innovative behavior and business performance among Generation Z university students. However, the study was limited to campus-based MSME entrepreneurs, thereby limiting its applicability to Generation Z entrepreneurs more broadly (Herijanto et al., 2025). Other studies on MSMEs have also confirmed the influence of Entrepreneurial Leadership on Business Performance; however, their participants generally came from diverse age groups, including senior entrepreneurs and Millennials, and did not specifically examine the characteristics of Generation Z (Anggriani & Kistyanto, 2021). Entrepreneurial Leadership also plays an important role in enhancing innovative behavior and business performance among entrepreneurs in East Java (Srimulyani et al., 2023). Similar findings have been reported in

international studies, indicating that Entrepreneurial Leadership can enhance organizational performance through creativity, innovation, and the strengthening of employee capabilities, although most of these studies have been conducted in the context of large companies or organizations with formal structures (Renko et al., 2015; Zhang et al., 2018; Bagheri, 2017). In addition, some previous studies have relied on limited performance indicators and have not yet adopted the more comprehensive Balanced Scorecard approach. This study examines how Entrepreneurial Leadership influences Business Performance in the context of Indonesia's rapidly growing Generation Z entrepreneur population. This generation has emerged as a catalyst for the growth of the creative and digital economy. Younger entrepreneurs have lower business survival rates and are therefore more vulnerable to business failure, as they often lack sufficient managerial, industry, and life experience to manage business risks effectively (Mayr et al., 2020). A Youth Co survey of young entrepreneurs in the Asia-Pacific region found that 88% of respondents experienced a decline in customer demand, one-third reported significant business slowdowns, and one-quarter had completely ceased business operations. Overall, 9 out of 10 entrepreneurs reported negative impacts on their businesses (United Nations Development Program, 2020). Without a proper understanding and development of appropriate leadership capabilities, businesses established by Generation Z entrepreneurs may face stagnation, declining competitiveness, and even business failure.

In this context, the present study examines the influence of Entrepreneurial Leadership on Business Performance among Generation Z entrepreneurs in Indonesia, providing a clearer understanding of the extent to which entrepreneurial leadership capabilities can support business success in this age group. The present study examines whether Entrepreneurial Leadership influences Business Performance among Generation Z entrepreneurs in Indonesia.

Theoretically, examining the role of Entrepreneurial Leadership among this age group is increasingly important because Generation Z possesses unique characteristics, such as high creativity and digital adaptability, but often lacks adequate managerial experience. Practically, the findings of this study may serve as a basis for mentoring programs, training, and development strategies for young entrepreneurs to help them sustain and grow their businesses amid rapidly changing market dynamics. Accordingly, this study seeks to test the hypothesis that Entrepreneurial Leadership positively affects Business Performance among Generation Z entrepreneurs in Indonesia.

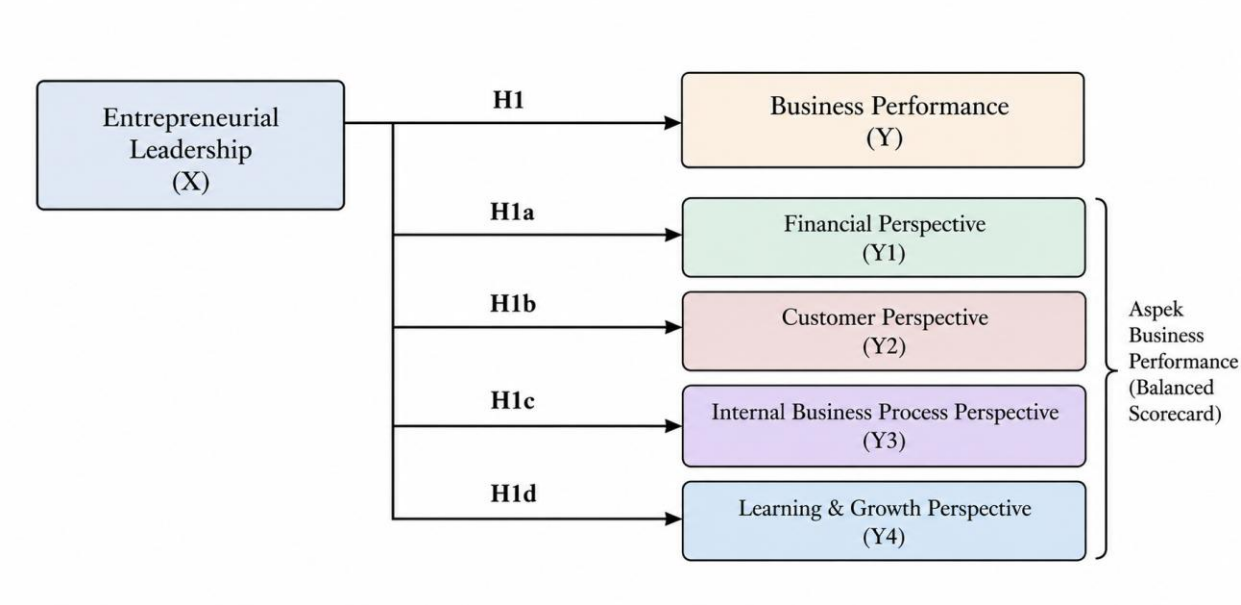
METHOD

This research employed a quantitative approach with a cross-sectional design. Participants were selected using purposive sampling based on predetermined eligibility criteria. The study involved Generation Z entrepreneurs in Indonesia who met the researchers' requirements. Of the 276 responses initially collected, 254 respondents met the screening criteria and were subsequently included in the analysis. The inclusion criteria were: (1) being within the Generation Z age range (approximately 17–28 years); (2) being the owner, founder, or primary decision-maker of a business; (3) having operated the business for at least 3 months;

(4) residing in and operating a business in Indonesia; and (5) being willing to participate by completing the research questionnaire in full. All data were obtained through self-report, as business owners are considered the parties best positioned to assess their leadership style and their businesses' performance.

The instruments used in this study consisted of the Entrepreneurial Leadership Scale and the Business Performance Scale. The Entrepreneurial Leadership variable was measured using an adapted scale developed by Gupta et al. (2004). The scale initially consisted of 22 items covering five dimensions: Framing the Challenge, Absorbing Uncertainty, Negotiating Opposition and Clearing the Path, Building Commitment, and Specifying Limits. Each item was rated on a five-point Likert scale (1 = Strongly Agree, 4 = Strongly Disagree). The Business Performance variable was assessed using items aligned with the four perspectives of the Balanced Scorecard (Kaplan & Norton, 1996): Financial, Customer, Internal Business Process, and Learning and Growth. The construct validity of the Balanced Scorecard has been supported by various empirical studies (Hoque & James, 2000). The item statements used in this study were adapted from a previous instrument (Suryaman Hami, 2009) and subsequently modified to suit the research context, namely Generation Z entrepreneurs in Indonesia. Adjustments were made to the language and context to reflect the characteristics of Generation Z entrepreneurs. Data were collected online via Google Forms, accompanied by an explanation of the research objectives and assurances regarding the confidentiality of participants' data. The collected data were subsequently screened before being analyzed using IBM SPSS Statistics 29. Data analysis included reliability testing, assumption testing involving normality and linearity, and simple linear regression to examine the effect of Entrepreneurial Leadership on Business Performance.

Based on the relationships among the variables described above, this study examined the effect of Entrepreneurial Leadership on overall Business Performance, as well as on the four perspectives used to measure it within the Balanced Scorecard approach: the Financial Perspective, Customer Perspective, Internal Business Process Perspective, and Learning and Growth Perspective. The relationships among the variables and perspectives are presented in the following research hypothesis framework.



Based on the research hypothesis framework, the hypotheses proposed in this study are as follows:

H1: *Entrepreneurial Leadership* affects *Business Performance*.
H1a: *Entrepreneurial Leadership* affects *Financial Perspective*.
H1b: *Entrepreneurial Leadership* affects *Customer Perspective*.
H1c: *Entrepreneurial Leadership* affects on *Internal Business Process Perspective*.
H1d: *Entrepreneurial Leadership* affects on *Learning & Growth* Perspective.

RESULT AND DISCUSSION

Result

Data were collected from 276 responses from Generation Z entrepreneurs in Indonesia who were both the owners and managers of their businesses. Following the screening process based on the predetermined criteria, 254 respondents met the eligibility requirements and were included in the subsequent analysis. The respondent profile was examined not only based on demographic characteristics but also on the characteristics of the businesses they operated. These characteristics provide an overview of the Generation Z entrepreneurs who participated in this study and examine the effect of Entrepreneurial Leadership on Business Performance. The demographic profiles and business characteristics of the respondents are presented in Table 1

Table 1. Demographic Profile of Respondents

Variable	Category	N	%	Variable	Category	N	%

Gender	Perempuan	149	58,7%	**Length of Business Operation**	<3 tahun	153	60,2%
	Laki-Laki	105	41,3%		3–5 tahun	69	27,2%
Age	17–19 tahun	36	14,2%		5–10 tahun	20	7,9%
	20–22 tahun	112	44,1%		>10 tahun	12	4,7%
	23–25 tahun	62	24,4%	**Average Annual Revenue**	≤ Rp25.000.000	135	53,1%
	26–28 tahun	44	17,3%		>Rp25.000.000–≤Rp50.000.000	34	13,4%
Educational Attainment	SD	1	0,4%		>Rp50.000.000–≤Rp100.000.000	29	11,4%
	SMP	1	0,4%		>Rp100.000.000–≤Rp300.000.000	20	7,9%
	SMA	138	54,3%		>Rp300.000.000–≤Rp500.000.000	17	6,7%
	D3	12	4,7%		>Rp1.000.000.000	19	7,5%
	S1	97	38,2%	**NIB Ownership**	Ya	68	26,8%
	S2	5	2,0%		Tidak	186	73,2%
Number of Employees	1–5 karyawan	219	86,2%	**NPWP Ownership**	Ya	76	29,9%
	6–20 karyawan	27	10,6%		Tidak	178	70,1%
	21–100 karyawan	8	3,1%	**Total Respondent**		**254**	**100,0%**

Business Status	Pemilik usaha (Owner)	60	23,6%
	Owner sekaligus pengelola usaha (Owner-Manager)	194	76,4%

Based on Table 1, the respondents were Generation Z entrepreneurs in Indonesia. By gender, the respondents comprised 149 females (58.7%) and 105 males (41.3%). In terms of age, the majority of respondents were aged 20–22 years, comprising 112 individuals (44.1%), followed by those aged 23–25 years with 62 individuals (24.4%), 26–28 years with 44 individuals (17.3%), and 17–19 years with 36 individuals (14.2%). Regarding educational attainment, the majority of respondents were high school graduates, totaling 138 individuals (54.3%), followed by bachelor's degree holders (S1) with 97 individuals (38.2%), diploma (D3) holders with 12 individuals (4.7%), master's degree holders (S2) with 5 individuals (2.0%), and elementary and junior high school graduates with 1 individual each (0.4%). The relatively high proportion of respondents with a bachelor's degree may be associated with exposure to higher education and entrepreneurial environments at universities, which can foster entrepreneurial intentions (Pahrudin et al., 2026).

Regarding business characteristics, the majority of respondents were owner-managers (194; 76.4%), while 60 (23.6%) were business owners only. This condition may be understood in relation to the number of employees, which was predominantly 1–5 employees, reported by 219 respondents (86.2%), suggesting that business owners tend to remain directly involved in business management and decision-making (Higgins & Mirza, 2013). In terms of business age, 153 respondents (60.2%) had operated their businesses for less than three years. Meanwhile, based on average annual revenue, the majority of respondents reported ≤ IDR 25,000,000, totaling 135 individuals (53.1%). These characteristics indicate that most respondents were still in the early stages of business development and operated on a relatively small scale, reflecting Generation Z entrepreneurs as new entrants to the entrepreneurial landscape (Ningtyas et al., 2026).

Regarding business legality, 186 respondents (73.2%) did not have a Business Identification Number (NIB), whereas 68 (26.8%) did. This condition indicates that some MSME operators may still lack an adequate understanding of the importance of and procedures for obtaining an NIB (Wibisono et al., 2022). Meanwhile, 178 respondents (70.1%) did not have a Taxpayer Identification Number (NPWP), while 76 (29.9%) did. The relatively low rate of NPWP ownership may be associated with the need to improve MSME operators'

understanding and awareness of the importance of having an NPWP and the procedures for obtaining one (Gunawan & Angelina, 2024).

Validity Test

Validity was assessed by examining the Corrected Item-Total Correlation (CI-TC) value for each item. An item was considered valid when its Corrected Item-Total Correlation value was greater than the r-table value. With a total of 254 respondents, the degrees of freedom (df) were 252 at a significance level of $\alpha = 0.05$ using a two-tailed test, resulting in an r-table value of 0.123. These results were subsequently evaluated against the r-table value to determine whether the items satisfied the established validity criteria.

Table 2. Validity of the Entrepreneurial Leadership (EL) Instrument

Item	Corrected Item–Total Correlation	Item	Corrected Item–Total Correlation	Item	Corrected Item–Total Correlation
EL1	0,528	EL8	0,593	EL15	0,530
EL2	0,535	EL9	0,609	EL16	0,634
EL3	0,549	EL10	0,627	EL17	0,588
EL4	0,618	EL11	0,577	EL18	0,556
EL5	0,628	EL12	0,682	EL19	0,510
EL6	0,525	EL13	0,694	EL20	0,579
EL7	0,584	EL14	0,605	EL21	0,618

Based on the validity testing results on table 3, the 13 items of the Business Performance (BP) instrument had Corrected Item-Total Correlation values ranging from 0.465 to 0.657. All values exceeded the r-table value (0.123); therefore, all items in the Business Performance instrument were considered valid and suitable for measuring the Business Performance variable.

Table 3. Validity of the Business Performance (BP) Instrument

Item	Corrected Item–Total Correlation	Item	Corrected Item–Total Correlation	Item	Corrected Item–Total Correlation

BP1	0,576	BP7	0,562	BP13	0,519
BP2	0,553	BP8	0,641		
BP3	0,657	BP9	0,650		
BP4	0,465	BP10	0,550		
BP5	0,645	BP11	0,599		

Reliability Test

Table 4. Reliability of the Business Performance (BP) Instrument

Instrumen	**Cronbach's Alpha**	**N of Items**
Entrepreneurial Leadership	0,926	21
Business Performance	0,891	13

Reliability testing was conducted to assess the instruments' internal consistency in measuring the research variables. An instrument was considered reliable when its Cronbach's Alpha value exceeded 0.70 (Ghozali, 2018). Both instruments had Cronbach's Alpha values above 0.70; therefore, the Entrepreneurial Leadership (EL) and Business Performance (BP) instruments were considered reliable, demonstrated good internal consistency, and were suitable for use in the study.

Normality Test

Based on the normality test conducted on the standardized residuals using data from 254 respondents, the Kolmogorov–Smirnov test yielded a significance value of 0.200, while the Shapiro–Wilk test yielded a significance value of 0.672. Both significance values were greater than 0.05. Therefore, the residuals are approximately normally distributed, indicating that the normality assumption for the simple linear regression analysis was satisfied. This result suggests that the residuals were distributed adequately around the regression model, with no substantial violation of the normality assumption. Consequently, the data were considered appropriate for further analysis using simple linear regression to examine the relationship between Entrepreneurial Leadership and Business Performance. Consequently, the data were considered appropriate for further analysis using simple linear regression to examine the relationship between Entrepreneurial Leadership and Business Performance. The fulfillment of this assumption provides further support for proceeding with the regression analysis and interpreting the resulting estimates without evidence of a meaningful departure from normality.

Table 5. Result of Normality Test

Variabel	Kolmogorov-Smirnov (Statistic)	dF	Sig.	Shapiro-Wilk (Statistic)	Sig.
Standardized-Residual	0.44	254	0,200	0,996	0.672

Linearity Test

Based on the linearity test between Entrepreneurial Leadership (EL) and Business Performance (BP), the significance value for Deviation from Linearity was 0.094. Since this value was greater than 0.05, there was no significant deviation from a linear relationship between Entrepreneurial Leadership and Business Performance. Therefore, the relationship between the two variables was considered linear, indicating that the linearity assumption for the simple linear regression analysis was satisfied.

Table 6. Result of Linearity Test

Sumber	Sum of Squares	dF	Mean Square	F	Sig,
Between Groups (Combined)	28.612	39	0.734	5.259	<.001
Linearity	21.427	1	21.427	153.3599	<.001
Deviation from Linearity	7.185	38	0.189	1.355	0.094
Within Groups	29.853	214	0.140	-	-
Total	58.465	253	-	-	-

Analysis of the Effect of Entrepreneurial Leadership on the Business Performance Perspectives

Simple Linear Regression Analysis

Table 7. Hypothesis Testing Result: The Effect of Entrepreunial Leadership on Business Performance

Variabel Independen	Variabel Dependen	B	β	t	p	R	R^2	F
Entrepreneurial Leadership	Business Performance	0.608	0.605	12.074	< 0.001	0.605	0.366	145.786

1. Effect of Entrepreneurial Leadership on the Financial Perspective of Business Performance

Hypothesis testing was conducted to determine whether Entrepreneurial Leadership (EL) has an effect on Business Performance (BP). The hypothesis was tested by examining the t-value and significance level in the Coefficients table. The hypothesis was considered supported when the significance value was < 0.05, indicating a significant effect of the independent variable on the dependent variable. Based on the results of the simple linear regression analysis, the t-value was 12.074 with a significance value of < 0.001. These results indicate that Entrepreneurial Leadership has a significant effect on Business Performance. Furthermore, the regression coefficient of 0.608 indicates that the effect is positive, meaning that an increase in Entrepreneurial Leadership is associated with an increase in Business Performance. Therefore, H_0 was rejected and H_1 was supported, indicating that the hypothesis stating that Entrepreneurial Leadership has a positive and significant effect on Business Performance was supported.

H_1: Entrepreneurial Leadership has a positive and significant effect on Business Performance.

Analysis of the Effect of Entrepreneurial Leadership on the Business Performance Perspectives

Table 7. Hypothesis Testing Results for the Effect of Entrepreneurial Leadership on Business Performance

Aspek Business Performance	**R**	**R^2**	**F**	**B**	**β**	**t**	**p**
Financial	0,402	0,161	46,947	0,538	0,402	6,852	< 0,001
Aspek Business Performance	**R**	**R^2**	**F**	**B**	**β**	**t**	**p**
Customer	0,963	0,928	3.138,867	0,893	0,963	56,026	< 0,001

Internal Business Process	0,526	0,277	96,544	0,612	0,526	9,826	< 0,001
Learning & Growth	0,514	0,264	90,421	0,683	0,514	9,509	< 0,001

Note: R = correlation coefficient; R^2 = coefficient of determination; F = ANOVA test statistic; B = regression coefficient; β = standardized regression coefficient; t = t-test statistic; p = significance level.

2. The Effect of Entrepreneurial Leadership on the Financial Perspective of Business Performance.

Entrepreneurial Leadership has a positive and significant effect on the Financial Perspective. This is indicated by the positive regression coefficient of 0.538 and a p-value < 0.001. The value of R = 0.402 indicates a positive relationship, while R^2 = 0.161 indicates that Entrepreneurial Leadership explains 16.1% of the variance in the Financial Perspective. The ANOVA results indicate that the regression model is significant, with F = 46.947 and p < 0.001.

H_1a: Entrepreneurial Leadership has a positive and significant effect on the Financial Perspective of Business Performance.

3. The Effect of Entrepreneurial Leadership on the Customer Perspective of Business Performance .

Entrepreneurial Leadership has a positive and significant effect on the Customer Perspective. This is indicated by the positive regression coefficient of 0.893 and a p-value < 0.001. The value of R = 0.963 indicates a very strong positive relationship, while R^2 = 0.928 indicates that Entrepreneurial Leadership explains 92.8% of the variance in the Customer Perspective. The ANOVA results indicate that the regression model is significant, with F = 3,138.867 and p < 0.001.

H_1b: Entrepreneurial Leadership has a positive and significant effect on the Customer Perspective of Business Performance.

4. The Effect of Entrepreneurial Leadership on the Internal Business Process Perspective of Business Performance.

Entrepreneurial Leadership has a positive and significant effect on the Internal Business Process Perspective. This is indicated by the positive regression coefficient of 0.612 and a p-value < 0.001. The value of R = 0.526 indicates a positive relationship, while R^2 = 0.277 indicates that Entrepreneurial Leadership explains 27.7% of the variance in the Internal Business Process Perspective. The ANOVA results indicate that the regression model is significant, with F = 96.544 and p < 0.001.

H_1c: Entrepreneurial Leadership has a positive and significant effect on the Internal

Business Process Perspective of Business Performance.

5. The Effect of Entrepreneurial Leadership on the Learning and Growth Perspective of Business Performance.

Entrepreneurial Leadership has a positive and significant effect on the Learning and Growth Perspective. This is indicated by the positive regression coefficient of 0.683 and a p-value < 0.001. The value of R = 0.514 indicates a positive relationship, while $R^2 = 0.264$ indicates that Entrepreneurial Leadership explains 26.4% of the variance in the Learning and Growth Perspective. The ANOVA results indicate that the regression model is significant, with F = 90.421 and p < 0.001.

H_1d: Entrepreneurial Leadership has a positive and significant effect on the Learning and Growth Perspective of Business Performance.

Discussion

The results of the study show that Entrepreneurial Leadership has a positive and significant effect on Business Performance among Generation Z entrepreneurs in Indonesia. The simple linear regression analysis yielded a t-value of 12.074 and a p-value < 0.001. The regression coefficient of 0.608 indicates that Entrepreneurial Leadership has a positive effect on Business Performance.

These findings are consistent with the study by Herijanto et al. (2025), which examined the effects of Entrepreneurial Leadership and Entrepreneurial Innovative Behavior on Business Performance among Generation Z university students who operate businesses. The study found that Entrepreneurial Leadership had a significant effect on Business Performance, both directly and indirectly through Entrepreneurial Innovative Behavior. Among MSME owners in Sidoarjo, Entrepreneurial Leadership was also found to influence Business Performance, both directly and indirectly through Innovative Work Behavior (Rumijati et al., 2023). Similarly, among culinary SME operators in Pekanbaru, Entrepreneurial Leadership was found to affect Business Performance both directly and indirectly through Innovation Capability (Nurjannah et al., 2025).

A positive and significant relationship between Entrepreneurial Leadership and Business Performance was also found among MSME owners in Denpasar. The findings highlight the role of Entrepreneurial Leadership and its strong correlation in explaining variations in Business Performance (Ariasih et al., 2024). In addition, Fildzah (2024) found that Entrepreneurial Leadership had a positive and significant effect on Business Performance among owners or managers of MSMEs in the laksa industry in Tangerang. The consistent direction and significance of these findings strengthen the present study's results, indicating that Entrepreneurial Leadership is one of the factors associated with Business Performance. Based on the Balanced Scorecard concept proposed by Kaplan and Norton (1992, 1996), Business Performance is a multidimensional construct reflected through four perspectives: Financial, Customer, Internal Business Process, and Learning and Growth. These four perspectives represent different dimensions of performance, ranging from financial

outcomes and customer relationships to the effectiveness of internal processes and the business's capacity to learn and grow. Therefore, to obtain a more comprehensive understanding of how Entrepreneurial Leadership is associated with Business Performance, the following discussion examines eac perspective.

In the Financial Perspective, Entrepreneurial Leadership had a positive and significant effect, with a regression coefficient of 0.538 and a significance value of < 0.001. The value of R = 0.402 indicates a positive relationship between Entrepreneurial Leadership and the Financial Perspective. The positive relationship between Entrepreneurial Leadership and financial performance suggests that the application of entrepreneurial-oriented Leadership may be associated with improved financial performance in small and medium-sized enterprises, including through the development of intellectual capital and innovation capabilities (Thongyai & Potipiroon, 2022). The implementation of Entrepreneurial Leadership has also been associated with improved financial performance in the creative industry (Maharani & Purba, 2025). In the context of Generation Z entrepreneurs, Entrepreneurial Leadership may serve to guide business decisions and actions toward achieving business objectives, including financial objectives. The ability to recognize opportunities helps entrepreneurs identify opportunities that can be developed into revenue sources. In contrast, decision-making abilities and resource optimization help direct capital, time, effort, and other resources toward activities that create value for the business.

With these capabilities supported by a strong emphasis on innovation, businesses can develop products and work processes that are better aligned with changing market needs. This process can support increased revenue, more efficient use of resources, and value creation for the business, which may ultimately be reflected in financial performance. The findings of Thongyai & Potipiroon (2022) support this mechanism by demonstrating that Entrepreneurial Leadership can influence financial performance through the development of intellectual capital and innovation capabilities. Nevertheless, Entrepreneurial Leadership accounts for only 16.1% of the variance in the Financial Perspective, with the remaining 83.9% explained by factors outside the research model. These factors may include financial knowledge, innovation capabilities, and intellectual capital, which may also contribute to resource management, innovation development, and financial decision-making within the business.

Next, in the Customer Perspective, Entrepreneurial Leadership demonstrated a positive and significant effect, with a regression coefficient of 0.893 and a significance value of < 0.001. The value of R = 0.963 indicates a very strong positive relationship between Entrepreneurial Leadership and the Customer Perspective, while R^2 = 0.928 indicates that Entrepreneurial Leadership explains 92.8% of the variance in this perspective. These findings are consistent with those of Kurniawan et al. (2024), who demonstrated an association between Entrepreneurial Leadership and customer experience-oriented aspects through Innovative Work Behavior. In their study, Entrepreneurial Leadership had a positive and significant effect on Innovative Work Behavior, which subsequently had a positive and significant effect on

Customer Experience Orientation Behavior. This relationship can be explained by the role of Entrepreneurial Leadership in encouraging individuals to remain open to change and develop new ways of carrying out their work. In a business context, this encouragement may be reflected in efforts to understand customer needs, adapt products and services, and identify new ways to deliver services. As innovative behavior is applied consistently, businesses have greater opportunities to provide experiences that are better aligned with customer needs. Thus, Innovative Work Behavior may represent one mechanism through which Entrepreneurial Leadership is associated with the achievement of the Customer Perspective, as Leadership that encourages innovation can translate into changes in how businesses respond to customer needs and experiences.

In the Internal Business Process Perspective, the results show that Entrepreneurial Leadership has a positive and significant effect on the Internal Business Process, with a regression coefficient of 0.612 and a significance value of < 0.001. The value of R = 0.526 indicates a positive relationship between the two variables, while R^2 = 0.277 indicates that Entrepreneurial Leadership explains 27.7% of the variance in the Internal Business Process. These findings suggest that implementing Entrepreneurial Leadership can support entrepreneurs' ability to develop and improve work processes, enabling business operations to run more effectively. Previous research has shown that implementing Entrepreneurial Leadership can support business process management and operational performance among batik SMEs in Indonesia (Usman et al., 2020). This study provides empirical support for a mechanism relevant to the Internal Business Process Perspective: opportunity- and innovation-oriented Leadership can encourage process improvement, the development of work methods, and adjustments to operational activities. Thus, Entrepreneurial Leadership can help entrepreneurs create internal processes that are more adaptive to business needs and changes. The remaining 72.3% of the variance not explained by the model may be associated with other factors outside the research model, such as quality management, operational capability, supply chain management, organizational learning capability, and innovation capability, which may also contribute to process improvement and business operational performance (Ali et al., 2019; Hong et al., 2019; Lee et al., 2021; Fernández et al., 2022).

In the Learning and Growth Perspective, Entrepreneurial Leadership had a positive and significant effect, with a regression coefficient of 0.683 and a significance value of < 0.001. The R^2 value of 0.264 indicates that Entrepreneurial Leadership explains 26.4% of the variance in the Learning and Growth Perspective. These findings are consistent with Khalid and Firdaus (2021), who found that Entrepreneurial Leadership had a significant effect on organizational learning among SMEs in Indonesia. In addition, Takeed et al. (2025) found that Entrepreneurial Leadership was positively associated with organizational learning and innovative work behavior among SMEs. This relationship can be explained by Entrepreneurial Leadership's ability to encourage businesses to remain open to change, acquire new knowledge, and develop the capabilities needed to respond to business demands. Continuous learning can enhance individual and organizational knowledge and competencies, which in turn support the

emergence of more innovative work behaviors. Thus, Entrepreneurial Leadership can create conditions that encourage learning, capacity development, and innovation as part of business growth. This mechanism is consistent with the finding that organizational learning serves as a link between Entrepreneurial Leadership and organizational adaptability among SMEs in Indonesia (Khalid & Firdaus, 2021).

Beyond Entrepreneurial Leadership, variation in the Learning and Growth Perspective may also be associated with other factors outside the model, such as organizational learning, competency development, knowledge sharing, employee training, and innovation capability. These factors can support individual and organizational capacity development, as well as learning, innovation, and business growth (Khalid & Firdaus, 2021; Takeed et al., 2025).

The results above indicate that Entrepreneurial Leadership contributes to the variation in Business Performance. However, this contribution does not account for the entire variation observed in Business Performance. The R^2 value of 0.367 indicates that Entrepreneurial Leadership explains 36.7% of the variance in Business Performance. In comparison, the remaining 63.3% represents variation that is not explained by the Entrepreneurial Leadership model examined in this study. This finding indicates that Entrepreneurial Leadership is one of the factors associated with Business Performance, but not the only one. Previous studies in Indonesia have shown that Business Performance is also associated with other factors, such as Innovation Capability, Entrepreneurial Orientation, and Dynamic Capabilities. Innovation Capability was found to have a positive and significant effect on Business Performance among SMEs in Kediri, East Java (Aini et al., 2013), while Entrepreneurial Orientation and Dynamic Capabilities were found to have positive and significant effects on Business Performance among batik MSMEs in Semarang City (Shofwani et al., 2023). Thus, variations in Business Performance among Generation Z entrepreneurs may be associated with various factors beyond Entrepreneurial Leadership. Based on these results, H_0 was rejected, and H_1 was supported.

CONCLUSION AND SUGGESTIONS

Conclusion

The findings provide evidence that Entrepreneurial Leadership is positively and significantly associated with Business Performance among Generation Z entrepreneurs in Indonesia. The analysis also demonstrates significant positive relationships between Entrepreneurial Leadership and each of the four Balanced Scorecard perspectives: Financial, Customer, Internal Business Process, and Learning and Growth. These results suggest that entrepreneurial leadership may support young entrepreneurs not only in pursuing financial outcomes but also in responding to customers, managing internal business activities, and developing organizational capabilities. Nevertheless, the proportion of unexplained variance indicates that additional factors beyond Entrepreneurial Leadership influence Business Performance.

Suggestions

From a theoretical perspective, the study adds empirical evidence regarding the relationship between Entrepreneurial Leadership and Business Performance in the context of Generation Z entrepreneurship in Indonesia. From a practical standpoint, young entrepreneurs may benefit from strengthening opportunity recognition, proactive decision-making, risk-taking, and innovation-oriented leadership capabilities. Future studies may incorporate additional variables, such as Innovation Capability, Digital Capability, Entrepreneurial Orientation, or Market Orientation, to obtain a broader explanation of Business Performance. Further research may also involve respondents with more diverse business characteristics and apply alternative research designs to provide additional evidence regarding the relationship between Entrepreneurial Leadership and Business Performance.

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