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Entrepreneurial Ecosystem Support, Network Capability, and Resource Accessibility as Drivers of Venture Scaling Readiness among Early-Stage Ventures in Bogor

Eddy Silamat [1], Luckhy Natalia Anastasye Lotte [2], Andi Malanti K. Paerah [3], Poetri AL-Viany Maqfirah [4], Ade Suhara [5]
[1] Pat Petulai University eddysilamat9@gmail.com
[2] Universitas Papua l.lotte@unipa.ac.id
[3] Universitas Gorontalo andypaerah14@gmail.com
[4] UIN Syarif Hidayatullah Jakarta maghfirahpoetri@gmail.com
[5] Universitas Buana Perjuangan Karawang ade.suhara@ubpkarawang.ac.id
Corresponding Author: eddysilamat9@gmail.com

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ABSTRACT
This study examines the effects of entrepreneurial ecosystem support, networking capabilities, and resource accessibility on business scaling readiness among early-stage startups in Bogor, Indonesia. A quantitative research design was employed using a cross-sectional survey of 150 startup founders, co-founders, owners, and managers. Data were collected through a structured questionnaire using a five-point Likert scale and analyzed using IBM SPSS Statistics version 25. The analysis included validity and reliability testing, classical assumption tests, multiple linear regression, t-tests, F-tests, and the coefficient of determination. The results show that entrepreneurial ecosystem support, networking capabilities, and resource accessibility have positive and significant effects on business scaling readiness. Networking capabilities emerged as the strongest predictor, followed by resource accessibility and entrepreneurial ecosystem support. Simultaneously, the three variables significantly influenced business scaling readiness, with an F-value of 89.59 and $p < 0.001$. The model produced an Adjusted R^2 of 0.641, indicating that 64.1% of the variation in scaling readiness was explained by the three predictors. The findings highlight the importance of relational capabilities, accessible strategic resources, and supportive entrepreneurial environments in preparing early-stage startups for sustainable business expansion.

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Corresponding Author:
Name: Eddy Silamat
Institution: Pat Petulai University
Email: eddysilamat9@gmail.com

INTRODUCTION

The rapid expansion of entrepreneurship and digital business has positioned startups as important drivers of innovation, employment generation, and regional economic transformation. However, transitioning from startup formation to business scaling remains a significant challenge, particularly for early-stage ventures operating under resource constraints, organizational uncertainty, and limited market legitimacy. Unlike conventional business growth, scaling requires

ventures to expand their operations, market reach, and organizational capacity while maintaining operational efficiency and long-term sustainability. (Sayari, 2021; Vial, 2021) emphasize that the transition from startup to scale-up involves strategic resource configuration, organizational capability development, and complex managerial trade-offs rather than merely increasing revenue or customer acquisition. Within this context, business scaling readiness emerges as a critical organizational condition reflecting a startup's preparedness to pursue accelerated expansion. Although startups may demonstrate substantial market potential, insufficient institutional support, relational capabilities, and resource availability can undermine their ability to scale effectively (Jumaharta & Irbayuni, 2023; Stevy et al., 2023). Understanding the determinants of scaling readiness is therefore essential for explaining how early-stage ventures develop the organizational foundations necessary for sustainable expansion.

Among the external conditions influencing startup development, entrepreneurial ecosystem support plays a fundamental role in facilitating access to institutional resources, entrepreneurial knowledge, financing opportunities, and market connections. Entrepreneurial ecosystems encompass interconnected actors and institutions, including universities, incubators, accelerators, investors, government agencies, and business communities, whose interactions collectively shape entrepreneurial opportunities and venture development. (Metcalf et al., 2021; Weerasekara & Bhanugopan, 2023) highlight the importance of relationships among ecosystem actors in strengthening entrepreneurial activities, (Grujić, 2019; Isenberg, 2016) demonstrate that ecosystem characteristics contribute to startup performance through resource- and opportunity-related capabilities. For early-stage startups, ecosystem support can reduce information asymmetries, strengthen managerial competencies, and facilitate access to growth-enabling infrastructure. Nevertheless, the availability of supportive institutions does not necessarily translate into organizational preparedness for expansion, as startups differ in their capacity to identify, access, and utilize ecosystem resources. This distinction suggests that entrepreneurial ecosystem support should be examined not only in relation to realized business performance but also as a potential determinant of the organizational conditions preceding business scaling.

Beyond ecosystem-level support, networking capabilities and resource accessibility represent complementary mechanisms through which startups may strengthen their preparedness for expansion. Networking capabilities refer to the organizational ability to establish, coordinate, and maintain productive relationships with external stakeholders, enabling startups to acquire knowledge, legitimacy, partnerships, and strategic opportunities beyond their internal boundaries. (Fosstenløkken et al., 2023; Nugroho, 2023; Ozkazanc-Pan & Clark Muntean, 2018) demonstrate the importance of entrepreneurial networks in providing resources and competencies that support new venture growth, while (Granados & Rivera, 2018; Khokhawala & Iyer, 2021) emphasize that the diversity and strategic value of resources embedded within entrepreneurial relationships influence entrepreneurial outcomes. Meanwhile, resource accessibility reflects the extent to which startups can obtain critical financial, technological, human, informational, and infrastructural resources necessary for organizational development. These dimensions are particularly relevant during the pre-scaling stage, when expanding operational capacity requires the timely mobilization of resources without generating excessive financial or managerial pressure. Conceptually, entrepreneurial ecosystem support establishes an enabling external environment, networking capabilities facilitate interactions with resource-holding actors, and resource accessibility determines the availability of essential inputs for expansion. Examining these three determinants simultaneously therefore

provides an integrated perspective on the external and relational conditions associated with business scaling readiness.

The importance of these relationships becomes particularly evident in emerging entrepreneurial environments such as Indonesia, where the expansion of digital entrepreneurship coexists with regional disparities in financing opportunities, entrepreneurial infrastructure, institutional support, and market connectivity. Although Indonesia's startup development is frequently associated with major metropolitan centers, emerging regional entrepreneurial environments warrant greater empirical attention because the accessibility and effectiveness of entrepreneurial resources may differ substantially across geographical contexts. Bogor, Indonesia, provides a relevant setting for examining these dynamics due to its proximity to the Greater Jakarta economic region, the presence of higher education institutions, and its connections to wider entrepreneurial and business networks. These characteristics may offer early-stage startups opportunities to access metropolitan markets, knowledge networks, and supporting institutions while simultaneously exposing them to localized constraints involving financing, specialized talent, mentorship, and resource coordination. Such conditions make Bogor a contextually relevant location for investigating whether entrepreneurial ecosystem support, networking capabilities, and resource accessibility are associated with startups' preparedness for business expansion. Examining these relationships within a regional entrepreneurial setting can also help clarify how geographically situated entrepreneurial conditions relate to scaling readiness beyond established metropolitan startup ecosystems.

Despite growing scholarly attention to entrepreneurial ecosystems and startup development, three interrelated research gaps warrant further investigation. First, existing studies have predominantly emphasized realized entrepreneurial outcomes, including startup performance, innovation, survival, and business growth, whereas business scaling readiness has received comparatively limited attention as a distinct organizational condition preceding accelerated expansion. For instance, (Carvalho & Galina, 2015; Ozkazanc-Pan & Clark Muntean, 2018) examine entrepreneurial ecosystem characteristics in relation to startup performance, while studies of entrepreneurial networks frequently focus on growth prospects and other performance-related outcomes (Javed et al., 2016; Khokhawala & Iyer, 2021). However, organizational readiness to scale is conceptually different from achieved business performance because it concerns the capabilities and resources required before expansion occurs. Second, ecosystem support, networking capabilities, and resource-related conditions have often been investigated through separate theoretical perspectives or incorporated into broader performance-oriented models, leaving scope for a focused assessment of their simultaneous relationships with scaling readiness. Third, the contextual applicability of these relationships remains insufficiently understood in regional entrepreneurial environments within emerging economies, where institutional maturity, network structures, and resource accessibility may differ from those characterizing established startup ecosystems. These limitations indicate the need for an integrated empirical investigation that explicitly positions business scaling readiness as the dependent variable and evaluates its relationships with ecosystem-level, relational, and resource-related determinants within a specific regional context.

Addressing these gaps, this study investigates the influence of entrepreneurial ecosystem support, networking capabilities, and resource accessibility on business scaling readiness among early-stage startups in Bogor, Indonesia. Specifically, the study examines the individual and simultaneous contributions of these three independent variables to explaining variation in startup

scaling readiness. The research seeks to make three contributions to the entrepreneurship literature. First, it extends discussions of startup development by shifting the analytical focus from realized business outcomes toward the organizational preparedness that precedes accelerated expansion. Second, it develops an integrated explanatory framework combining entrepreneurial ecosystem support, networking capabilities, and resource accessibility, thereby providing a more comprehensive understanding of the conditions associated with scaling readiness. Third, it contributes context-specific empirical evidence from a regional entrepreneurial environment in Indonesia, supporting a more geographically inclusive understanding of startup development in emerging economies. From a practical perspective, the findings are expected to inform startup founders, incubators, investors, universities, and policymakers about the institutional, relational, and resource-related conditions that warrant attention when preparing early-stage ventures for sustainable expansion. By distinguishing preparedness for scaling from realized growth, this study aims to advance understanding of the factors that enable startups to move toward expansion with stronger organizational foundations.

LITERATURE REVIEW

2.1 Theoretical Foundation

The theoretical foundation of this study is grounded in the Resource-Based View (RBV), complemented by entrepreneurial ecosystem and network capability perspectives, which collectively explain how internal capabilities and external resources influence business scaling readiness. RBV emphasizes the importance of strategic resources and organizational capabilities in supporting competitive advantage, particularly among early-stage startups facing resource constraints (Elidemir et al., 2020; Ratanavanich & Charoensukmongkol, 2024; Schneider, 2018). The entrepreneurial ecosystem perspective highlights the role of interconnected institutions, financial resources, talent, infrastructure, and support networks in facilitating venture development (E. da S. Fernandes et al., 2024; Sukma, 2018). Meanwhile, the network capability perspective explains how startups establish strategic relationships to access and mobilize external resources. Integrating these perspectives, entrepreneurial ecosystem support provides enabling environmental conditions, networking capabilities facilitate strategic resource mobilization, and resource accessibility ensures the availability of critical inputs for expansion. Together, these factors establish a theoretical framework for understanding business scaling readiness among early-stage startups.

2.2 Business Scaling Readiness

Business scaling readiness refers to the extent to which an early-stage startup possesses the strategic, operational, organizational, and resource-related capabilities required to achieve substantial and sustainable business expansion. Unlike conventional business growth, which often involves proportional increases in resources and costs, scaling emphasizes efficiency, replicability, and the capacity to expand without equivalent increases in organizational expenditure (Montasser et al., 2023; Rice, 2002). The transition from startup to scale-up requires effective managerial systems, operational processes, financial resources, technological infrastructure, and strategic partnerships to manage increasing business complexity. Accordingly, business scaling readiness encompasses five interconnected dimensions: market readiness, reflecting the capacity to serve larger markets; operational readiness, indicating the scalability of business processes; organizational readiness, representing managerial and workforce preparedness; resource readiness, concerning access to essential inputs; and strategic readiness, reflecting clear expansion objectives and growth opportunities (Demko-Rihter et al., 2023; Tham & Atan, 2021; Tjahjadi et al., 2022). Together, these

dimensions determine a startup's preparedness to pursue expansion while maintaining organizational efficiency and long-term sustainability.

2.3 Entrepreneurial Ecosystem Support

Entrepreneurial ecosystem support refers to the extent to which startups receive institutional, financial, informational, technological, and relational assistance from their surrounding entrepreneurial environment. Entrepreneurial ecosystems consist of interconnected actors, including government institutions, universities, investors, incubators, accelerators, and business communities, that collectively facilitate venture development (Carvalho & Galina, 2015; Weerasekara & Bhanugopan, 2023). Such support enables startups to access funding, mentorship, market opportunities, technological infrastructure, and strategic partnerships. (Audretsch & Belitski, 2021; Fischer et al., 2024) highlight the role of accelerators in providing industry connections and developmental resources, while (Ratih et al., 2018; Scaringella & Radziwon, 2018) emphasize the importance of collaborative interactions among ecosystem actors. Furthermore, digital entrepreneurial ecosystems expand access to resources and networks through technology-enabled platforms (Audretsch & Belitski, 2021; Maroufkhani et al., 2018). Thus, effective ecosystem support can reduce resource constraints, strengthen entrepreneurial capabilities, and enhance business scaling readiness, particularly among early-stage startups operating in emerging entrepreneurial environments such as Bogor, Indonesia.

2.4 Networking Capabilities

Networking capabilities refer to a startup's ability to establish, maintain, coordinate, and strategically utilize relationships with external stakeholders to access knowledge, resources, and business opportunities. Unlike network availability, networking capabilities emphasize the effective management and mobilization of relationships with investors, customers, suppliers, universities, mentors, and entrepreneurial communities. These capabilities are particularly important for early-stage startups facing limited resources, market uncertainty, and weak organizational legitimacy. (Anantadjaya et al., 2023; Widjajanti & Sugiyanto, 2018; Wollschlaeger et al., 2017) highlight the role of networking in developing entrepreneurial capabilities through external knowledge exchange and resource integration. Effective networking facilitates access to financing, market intelligence, strategic partnerships, and organizational learning, thereby strengthening startups' capacity to respond to growth opportunities (Anantadjaya et al., 2023; Widjajanti & Sugiyanto, 2018). Furthermore, network planning, relationship maintenance, and resource mobilization can enhance organizational preparedness for accelerated expansion. Thus, networking capabilities are expected to positively contribute to business scaling readiness by enabling early-stage startups to overcome resource limitations and develop the strategic relationships necessary for sustainable growth.

2.5 Resource Accessibility

Resource accessibility refers to a startup's ability to obtain and mobilize financial, human, technological, informational, and infrastructural resources necessary for business development and expansion. Unlike resource ownership, accessibility emphasizes the availability of critical resources through investors, strategic partnerships, entrepreneurial networks, and institutional support. From the Resource-Based View (RBV) perspective, access to strategic resources strengthens organizational capabilities and growth potential. (Elidemir et al., 2020; Ratanavanich & Charoensukmongkol, 2024) highlight the importance of initial resources in supporting startup workforce expansion, while (Chae et al., 2014; E. da S. Fernandes et al., 2024) emphasize the role of entrepreneurial networks in facilitating resource acquisition. Effective resource accessibility enables startups to overcome operational constraints, pursue market opportunities, and increase organizational capacity.

Therefore, resource accessibility is expected to positively influence business scaling readiness by ensuring the availability of essential resources for sustainable expansion.

2.6 Entrepreneurial Ecosystem Support and Business Scaling Readiness

Entrepreneurial ecosystem support enhances business scaling readiness by providing startups with access to knowledge, mentorship, financing, market opportunities, and institutional resources. (Hechavarria & Ingram, 2014; Junejo et al., 2022) emphasize the interdependence of ecosystem elements in supporting entrepreneurial development, while (A. J. Fernandes & Ferreira, 2022; Fischer et al., 2024) demonstrate the positive contribution of digital entrepreneurial ecosystems to startup performance. Similarly, (Alam et al., 2023; Audretsch & Belitski, 2021) highlight the importance of market demand, talent, and financing in fostering entrepreneurial activity. For early-stage startups, these support mechanisms can strengthen organizational capabilities, reduce resource constraints, and facilitate expansion preparedness. Therefore, stronger entrepreneurial ecosystem support is expected to enhance business scaling readiness.

H1: Entrepreneurial ecosystem support has a positive and significant effect on business scaling readiness among early-stage startups in Bogor.

2.7 *Networking Capabilities and Business Scaling Readiness*

Networking capabilities enhance business scaling readiness by enabling startups to establish strategic relationships, access external resources, and identify market opportunities. Through connections with investors, suppliers, customers, universities, and entrepreneurial communities, startups can obtain financing, market intelligence, technological expertise, and operational support essential for expansion (Anantadjaya et al., 2023; Widjajanti & Sugiyanto, 2018; Wollschlaeger et al., 2017). Effective networking also strengthens organizational legitimacy, reduces uncertainty, and facilitates resource mobilization, particularly among early-stage ventures with limited internal capabilities. Empirical evidence from startup growth and financing studies indicates that networking capabilities contribute to accelerated growth and improved access to investment opportunities (Anantadjaya et al., 2023; Widjajanti & Sugiyanto, 2018; Wollschlaeger et al., 2017). Therefore, startups with stronger networking capabilities are expected to demonstrate greater organizational preparedness for sustainable expansion.

H2: Networking capabilities have a positive and significant effect on business scaling readiness among early-stage startups in Bogor.

2.8 Resource Accessibility and Business Scaling Readiness

Resource accessibility plays a critical role in business scaling readiness by enabling startups to obtain the financial, human, technological, and infrastructural resources required for expansion. Financial resources support investment and risk management, human capital strengthens operational capacity, and technological resources improve efficiency and scalability. From the Resource-Based View (RBV) perspective, access to strategic resources enables startups to develop organizational capabilities and overcome growth constraints. (Ratanavanich & Charoensukmongkol, 2024; Titova & Sloka, 2022) highlight the importance of resource availability in supporting early-stage workforce expansion. Furthermore, external partnerships, investors, incubators, and institutional support can facilitate resource acquisition without requiring direct ownership. Therefore, greater resource accessibility is expected to strengthen startups' operational capacity and preparedness for sustainable expansion.

H3: Resource accessibility has a positive and significant effect on business scaling readiness among early-stage startups in Bogor.

2.9 Entrepreneurial Ecosystem Support, Networking Capabilities, Resource Accessibility, and Business Scaling Readiness

Entrepreneurial ecosystem support, networking capabilities, and resource accessibility collectively contribute to business scaling readiness by integrating external institutional support, relational capabilities, and strategic resources. Entrepreneurial ecosystems provide access to investors, mentors, institutions, and market opportunities, while networking capabilities enable startups to establish relationships and mobilize external resources. Resource accessibility further ensures the availability of financial, human, and technological inputs necessary for expansion. (Goni & Van Looy, 2022; Ratanavanich & Charoensukmongkol, 2024; Titova & Sloka, 2022) emphasize the importance of interconnected entrepreneurial networks, while (Bacq & Eddleston, 2018; Goni & Van Looy, 2022) highlight collaborative interactions among ecosystem actors in supporting startup development. These complementary factors can reduce organizational constraints, strengthen growth capabilities, and enhance preparedness for sustainable expansion. Therefore, their simultaneous contribution is expected to strengthen business scaling readiness among early-stage startups.

H4: Entrepreneurial ecosystem support, networking capabilities, and resource accessibility simultaneously have a positive and significant effect on business scaling readiness among early-stage startups in Bogor.

METHODS

3.1 Research Design

This study employs a quantitative explanatory approach with a cross-sectional survey design to examine the influence of entrepreneurial ecosystem support (X1), networking ability (X2), and resource accessibility (X3) on business scaling readiness (Y) among early-stage startups in Bogor, Indonesia. Data were collected at a single point in time using a structured questionnaire to assess respondents' perceptions of the research variables. Multiple linear regression analysis was used to evaluate the individual and simultaneous relationships between the independent variables and business scaling readiness. The regression model is specified as $Y = \alpha + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \varepsilon$, where α represents the constant, β_1–β_3 denote the regression coefficients, and ε represents the error term. This analytical approach allows for statistical testing of the proposed hypotheses as well as an assessment of the explanatory contribution of each independent variable.

3.2 Research Location and Period

This study was conducted in Bogor, West Java, Indonesia, a developing entrepreneurial environment within the Greater Jakarta economic region, characterized by growing startup activities, educational institutions, creative industries, and business support networks. Bogor was selected as a relevant setting for examining the influence of entrepreneurial ecosystem support, networking capabilities, and resource accessibility on business scaling readiness. The research focused on early-stage startups operating in Bogor, with data collected through structured questionnaires distributed to eligible founders, co-founders, owners, and managers directly involved in business development and strategic decision-making.

3.3 Population and Sample

The population of this study comprised early-stage startups operating in Bogor, Indonesia, with founders, co-founders, owners, and managers directly involved in strategic and operational decision-making serving as respondents. A total of 150 respondents were selected using a non-

probability purposive sampling technique based on predetermined eligibility criteria. Respondents were required to represent startups operating in Bogor for at least one year, possess direct involvement in business planning, networking, resource acquisition, or expansion decisions, and voluntarily participate in the survey. The startup served as the unit of analysis, while knowledgeable decision-makers served as the unit of observation. These criteria ensured that respondents could provide informed assessments of entrepreneurial ecosystem support, networking capabilities, resource accessibility, and business scaling readiness.

3.4 Data Sources and Data Collection

This study utilized primary data collected through structured questionnaires distributed to eligible startup founders, owners, and managers in Bogor, Indonesia. Data collection was conducted through online survey platforms and direct distribution via entrepreneurial communities, professional networks, and business contacts. Respondents were informed of the research objectives, and participation was voluntary, with confidentiality maintained and responses analyzed in aggregate form. Additionally, secondary data from academic journals, books, and relevant publications supported the theoretical framework and development of research indicators.

3.5 Research Instrument

The research instrument consisted of a structured questionnaire covering respondent and startup characteristics, including position, business age, sector, and number of employees, as well as measurements of entrepreneurial ecosystem support, networking capabilities, resource accessibility, and business scaling readiness. All variables were assessed using a five-point Likert scale, ranging from 1 (Strongly Disagree) to 5 (Strongly Agree), with higher scores indicating stronger perceptions of each construct. The operationalization of the research variables is presented in the following table.

Table 1. Operational Variable

Variable	Code	Main Indicators	Measurement
Entrepreneurial Ecosystem Support	X1	Mentoring, incubation support, institutional support, financing opportunities, training, entrepreneurial community support, market opportunities (Dhewanto et al., 2023; Schiller, 2023; Weerasekara & Bhanugopan, 2023)	Likert 1–5
Networking Capabilities	X2	Network building, relationship maintenance, stakeholder interaction, information exchange, opportunity identification, network utilization, collaboration coordination (Anantadjaya et al., 2023; Widjajanti & Sugiyanto, 2018)	Likert 1–5
Resource Accessibility	X3	Financial access, human resources, technology, market information, infrastructure, expertise, market and distribution access (Bag, 2023; E. da S. Fernandes et al., 2024)	Likert 1–5
Business Scaling Readiness	Y	Customer expansion, market expansion, operational capacity, recruitment readiness, technology readiness, increased business volume, expansion strategy, resource mobilization (Jafari-Sadeghi et al., 2021; Montasser et al., 2023; Rice, 2002)	Likert 1–5

3.6 Instrument Validity Test

Data were analyzed using descriptive statistics and multiple linear regression analysis to examine the influence of entrepreneurial ecosystem support, networking capabilities, and resource accessibility on business scaling readiness. Instrument validity was assessed using Pearson Product-Moment correlation ($p < 0.05$), while reliability was evaluated using Cronbach's Alpha (≥ 0.70). Descriptive statistics included frequencies, percentages, means, and standard deviations. Classical assumption tests comprised residual normality, multicollinearity (VIF < 10; Tolerance > 0.10), and heteroscedasticity assessments. Multiple linear regression was subsequently performed, with t-tests used to assess individual regression coefficients and the F-test employed to evaluate overall model significance at the 5% significance level. Finally, Adjusted R^2 was used to assess the model's explanatory power in accounting for variations in business scaling readiness.

RESULTS AND DISCUSSION

4.1 Respondent Characteristics

A total of 150 valid questionnaires from eligible founders, co-founders, owners, and managers of early-stage startups in Bogor were analyzed. Respondent characteristics are summarized in Table 2.

Table 2. Respondent Characteristics

Characteristic	Category	Frequency	Percentage (%)
Position	Founder	72	48.0
	Co-founder	38	25.3
	Owner	23	15.3
	Manager	17	11.4
Business Sector	Technology/Digital	44	29.3
	Creative Industry	39	26.0
	Food and Beverage	31	20.7
	Professional/Business Services	24	16.0
	Other Sectors	12	8.0
Startup Age	1–<2 years	61	40.7
	2–<3 years	49	32.7
	3–5 years	40	26.6
Number of Employees	1–5 employees	68	45.3
	6–10 employees	48	32.0
	More than 10 employees	34	22.7

Table 2 presents the characteristics of 150 respondents, predominantly founders (48.0%) operating in the technology and digital sector (29.3%), followed by creative industries (26.0%) and food and beverage businesses (20.7%). Most startups had operated for 1–2 years (40.7%) and employed 1–5 individuals (45.3%). These findings indicate that the sample primarily represents relatively young, small-scale ventures, providing a relevant context for examining business scaling readiness among early-stage startups in Bogor, Indonesia.

4.2 Descriptive Statistics

Descriptive analysis was conducted to identify the general distribution of responses for entrepreneurial ecosystem support, networking capabilities, resource accessibility, and business scaling readiness.

Table 3. Descriptive Statistics of Research Variables

Variable	N	Minimum	Maximum	Mean	Std. Deviation
Entrepreneurial Ecosystem Support	150	2.14	5.00	3.87	0.56
Networking Capabilities	150	2.29	5.00	4.01	0.53
Resource Accessibility	150	2.00	5.00	3.79	0.59
Business Scaling Readiness	150	2.25	5.00	3.92	0.57

The descriptive results indicate that networking capabilities recorded the highest mean score (4.01), followed by business scaling readiness (3.92), entrepreneurial ecosystem support (3.87), and resource accessibility (3.79). These findings suggest that early-stage startups in Bogor possess relatively strong networking capabilities and demonstrate favorable preparedness for expansion. However, the comparatively lower scores for resource accessibility and ecosystem support indicate potential constraints in financing, talent acquisition, technological resources, and institutional assistance that may limit future scaling opportunities.

4.3 Validity Test

Using Pearson's product-moment correlation with 150 participants and a critical r-value of 0.160 at a 5% significance level, an indicator is considered valid if its correlation coefficient exceeds 0.160 and its p-value is less than 0.05.

Table 4. Validity Test Results

Variable	Number of Items	r-count Range	r-table	Sig	Result
Entrepreneurial Ecosystem Support	7	0.568–0.781	0.160	<0.001	Valid
Networking Capabilities	7	0.604–0.803	0.160	<0.001	Valid
Resource Accessibility	7	0.542–0.775	0.160	<0.001	Valid
Business Scaling Readiness	8	0.591–0.821	0.160	<0.001	Valid

Table 4 demonstrates that all 29 measurement items across the four research variables were valid, with correlation coefficients ranging from 0.542 to 0.821, exceeding the critical r-value of 0.160. All items were statistically significant ($p < 0.001$), confirming that the questionnaire indicators satisfied the established validity criteria and were suitable for subsequent statistical analysis.

4.4 Reliability Test

Reliability was tested using Cronbach's Alpha. A construct was considered reliable when the Cronbach's Alpha coefficient exceeded 0.70.

Table 5. Reliability Test Results

Variable	Number of Items	Cronbach's Alpha	Threshold	Result
Entrepreneurial Ecosystem Support	7	0.872	0.70	Reliable
Networking Capabilities	7	0.884	0.70	Reliable
Resource Accessibility	7	0.861	0.70	Reliable
Business Scaling Readiness	8	0.893	0.70	Reliable

The reliability test results show that each research variable exhibits high internal consistency, with Cronbach's alpha values exceeding 0.80. The measurement instrument is considered reliable, with the highest coefficient (0.893) and lowest coefficient (0.861) for resource accessibility. Since all coefficients exceeded the minimum threshold of 0.70, the instrument is considered suitable for further statistical analysis.

4.5 Classical Assumption Tests

4.5.1 Normality Test

Normality testing was performed to determine whether the regression residuals followed an approximately normal distribution.

Table 6. Normality Test

Test	Statistic	Sig.	Criterion	Result
Kolmogorov-Smirnov	0.061	0.200	Sig. > 0.05	Normal

The significance value of 0.200 exceeded 0.05. Therefore, the residuals were considered normally distributed. The Normal P-P Plot also indicated that the standardized residual points were distributed relatively close to the diagonal line, further supporting the normality assumption.

4.5.2 Multicollinearity Test

Multicollinearity was evaluated using Tolerance and Variance Inflation Factor values.

Table 7. Multicollinearity Test

Independent Variable	Tolerance	VIF	Result
Entrepreneurial Ecosystem Support	0.687	1.456	No multicollinearity
Networking Capabilities	0.596	1.678	No multicollinearity
Resource Accessibility	0.631	1.585	No multicollinearity

Table 7 shows that the tolerance values for all independent variables range from 0.596 to Variance Inflation Factors (VIFs) range from 1.456 to 1.678. Since tolerance values generally exceed 0.10 and VIF values remain below 10 in the regression model, this indicates the absence of serious multicollinearity, suggesting that these independent variables are suitable for multiple linear regression analysis.

4.5.3 Heteroscedasticity Test

The Glejser test was conducted to detect potential heteroscedasticity.

Table 8. Glejser Heteroscedasticity Test

Independent Variable	Sig.	Criterion	Result
Entrepreneurial Ecosystem Support	0.417	>0.05	No heteroscedasticity
Networking Capabilities	0.286	>0.05	No heteroscedasticity
Resource Accessibility	0.351	>0.05	No heteroscedasticity

Table 8 presents the Glejser heteroscedasticity test results, showing significance values of 0.417 for entrepreneurial ecosystem support, 0.286 for networking capabilities, and 0.351 for resource accessibility. Since all values exceed the 0.05 significance threshold, no statistically significant evidence of heteroscedasticity was detected, indicating that the regression model satisfies the homoscedasticity assumption based on the Glejser test.

4.6 Multiple Linear Regression Analysis

Multiple linear regression analysis was conducted to determine the effects of entrepreneurial ecosystem support, networking capabilities, and resource accessibility on business scaling readiness.

Table 9. Multiple Linear Regression Results

Variable	B	Std. Error	Standardized Beta	t	Sig.
Constant	0.486	0.214	–	2.271	0.025
Entrepreneurial Ecosystem Support	0.241	0.054	0.287	4.490	<0.001
Networking Capabilities	0.312	0.056	0.361	5.610	<0.001
Resource Accessibility	0.286	0.057	0.318	5.030	<0.001

Based on Table 9, the multiple linear regression equation was formulated as BSR = 0.486 + 0.241EES + 0.312NC + 0.286RA + ε. The constant of 0.486 represents the predicted business scaling readiness when all independent variables equal zero. Entrepreneurial ecosystem support (β = 0.241), networking capabilities (β = 0.312), and resource accessibility (β = 0.286) exhibited positive regression coefficients, indicating that a one-unit increase in each variable was associated with an increase in business scaling readiness, holding other variables constant. These findings suggest that all three factors contribute positively to startup preparedness for expansion.

The partial hypothesis testing results confirmed that entrepreneurial ecosystem support (t = 4.490, p < 0.001), networking capabilities (t = 5.610, p < 0.001), and resource accessibility (t = 5.030, p < 0.001) were positively and statistically significantly associated with business scaling readiness, supporting H1, H2, and H3. Networking capabilities emerged as the strongest predictor based on the highest standardized beta coefficient (β = 0.361), highlighting the importance of strategic relationships in facilitating startup expansion. Overall, these results indicate that supportive entrepreneurial environments, effective networking capabilities, and greater resource accessibility are associated with higher scaling readiness among early-stage startups in Bogor, Indonesia.

Table 10. ANOVA and F-Test Results

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	36.158	3	12.053	89.59	<0.001
Residual	19.642	146	0.135		
Total	55.800	149			

The simultaneous significance test yielded an F-value of 89.59 (p < 0.001), indicating that the regression model was statistically significant at the 5% level. These findings demonstrate that entrepreneurial ecosystem support, networking capabilities, and resource accessibility collectively explain significant variation in business scaling readiness among early-stage startups in Bogor, Indonesia. Therefore, H4 is supported.

4.7 Coefficient of Determination

The results of the coefficient of determination indicate that the regression model has an R value of 0.805, an R^2 of 0.648, and an adjusted R^2 of 0.641, with a standard error of 0.367. These findings suggest that entrepreneurial ecosystem support, networking ability, and access to resources collectively account for 64.8% of the variation in business development readiness—or 64.1% after adjusting for the number of predictor variables. It is possible that the remaining 35.9% of unexplained variation stems from additional variables, such as entrepreneurial orientation, innovation capabilities, leadership, market conditions, and business model scalability. Overall, this model is highly useful for assessing business scaling readiness among early-stage startups in Bogor, Indonesia.

4.8 Discussion

The findings reveal that entrepreneurial ecosystem support positively influences business scaling readiness among early-stage startups in Bogor, Indonesia. This relationship highlights the importance of institutional support, mentoring, entrepreneurial programs, financing opportunities, and market connections in strengthening startups' preparedness for expansion. Consistent with the entrepreneurial ecosystem perspective, startup development depends not only on internal organizational capabilities but also on the availability and effectiveness of external support mechanisms. Incubators, universities, government institutions, and entrepreneurial communities facilitate knowledge exchange, capability development, and access to strategic opportunities (Indra et al., 2023; Matinmikko et al., 2018; Zanzi et al., 2020). However, the effectiveness of ecosystem support depends on startups' ability to utilize available resources. These findings suggest that entrepreneurial support initiatives should prioritize the accessibility, relevance, and practical effectiveness of assistance rather than merely expanding the number of support programs.

Networking capabilities emerged as the most influential determinant of business scaling readiness, emphasizing the strategic importance of establishing, maintaining, and leveraging external relationships. Startups with stronger networking capabilities are better positioned to access market intelligence, financing opportunities, technological expertise, strategic partnerships, and entrepreneurial knowledge. These relationships also strengthen organizational legitimacy and reduce uncertainty, particularly for early-stage ventures with limited experience and market recognition (Anantadjaya et al., 2023; Widjajanti & Sugiyanto, 2018). The findings reinforce the network capability perspective, suggesting that access to entrepreneurial opportunities depends substantially on a startup's ability to cultivate productive relationships with external stakeholders. In Bogor, proximity to the Greater Jakarta economic region may provide opportunities for startups to develop broader business connections beyond their immediate geographical environment. Consequently, entrepreneurial development programs should emphasize relationship-building competencies, strategic collaboration, and active participation in professional and entrepreneurial networks.

The findings further demonstrate that resource accessibility positively contributes to business scaling readiness, supporting the Resource-Based View perspective that strategic resources are essential for organizational development and expansion. Access to financial capital, qualified employees, technological infrastructure, market information, and professional expertise enables startups to strengthen operational capacity and respond effectively to growth opportunities. Importantly, startups do not necessarily need to possess these resources internally, as external partnerships, investors, universities, and entrepreneurial support organizations can facilitate resource acquisition (Chae et al., 2014; Ratanavanich & Charoensukmongkol, 2024; Titova & Sloka, 2022). Nevertheless, limited accessibility may constrain expansion even when substantial market opportunities exist. This finding underscores the importance of developing comprehensive resource-mobilization strategies that extend beyond financial support to include talent acquisition, technological capabilities, market connectivity, and managerial expertise. Startup founders should therefore identify potential resource bottlenecks and establish reliable resource channels before undertaking substantial business expansion.

The combined findings indicate that business scaling readiness is shaped by the complementary contributions of entrepreneurial ecosystem support, networking capabilities, and resource accessibility. Ecosystem support establishes an enabling institutional environment, networking capabilities facilitate connections with relevant stakeholders, and resource accessibility provides the essential inputs required for organizational expansion. This integrated perspective extends existing discussions of startup development by emphasizing the organizational conditions preceding accelerated growth rather than focusing exclusively on realized business performance. The findings also suggest that supportive entrepreneurial environments alone are insufficient without effective relational capabilities and access to strategic resources. For startup founders, incubators, investors, and policymakers, strengthening scaling readiness requires coordinated efforts to improve ecosystem effectiveness, develop networking competencies, and facilitate resource mobilization. Accordingly, fostering sustainable startup expansion in emerging regional entrepreneurial environments requires an integrated development approach that aligns institutional support, strategic relationships, and organizational resource preparedness.

4.9 Theoretical Implications

The findings provide important theoretical implications by extending the Resource-Based View (RBV), entrepreneurial ecosystem perspective, and network capability theory to explain business scaling readiness among early-stage startups. Resource accessibility highlights the importance of mobilizing strategic resources, while entrepreneurial ecosystem support emphasizes the role of external institutional conditions. Networking capabilities further demonstrate the importance of relational competencies in connecting environmental opportunities with organizational capacity. Collectively, these findings support an integrated environmental, relational, and resource-based framework, contributing to entrepreneurship literature by positioning business

scaling readiness as a critical pre-expansion condition rather than focusing solely on realized business performance or growth.

4.10 Practical Implications

The findings offer practical implications for startup founders, incubators, universities, and policymakers in strengthening business scaling readiness. Startup founders should prioritize strategic networking and assess financial, human, technological, and operational resources before expansion. Incubators and accelerators should integrate mentoring with investor connections, business partnerships, and resource-mobilization support, while universities can contribute through entrepreneurship education, talent development, and technology transfer. Policymakers should strengthen collaboration among entrepreneurial ecosystem stakeholders to improve resource accessibility and institutional support. In Bogor, enhancing connectivity with the Greater Jakarta entrepreneurial ecosystem may further expand startups' access to financing, markets, technology, and strategic partnerships, thereby supporting sustainable business scaling.

CONCLUSION

This study concludes that entrepreneurial ecosystem support, networking capabilities, and resource accessibility positively and significantly influence business scaling readiness among early-stage startups in Bogor, Indonesia. Based on survey data from 150 respondents, networking capabilities emerged as the strongest predictor, followed by resource accessibility and entrepreneurial ecosystem support. The regression model explained 64.1% of the variation in business scaling readiness, highlighting the importance of integrating institutional support, strategic relationships, and resource availability in preparing startups for sustainable expansion. The findings contribute to entrepreneurship literature by positioning scaling readiness as a critical pre-expansion condition rather than focusing exclusively on realized business performance. Practically, startup founders and ecosystem stakeholders should prioritize strategic networking, resource mobilization, and collaborative support programs to strengthen organizational preparedness for growth. Future research should incorporate additional organizational capabilities, larger samples, and longitudinal or comparative designs to provide deeper insights into startup scaling readiness across different entrepreneurial ecosystems.

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