

The Relationship between Startup Incubator Development and Venture Capital Investment on Digital Economic Growth in Indonesia

Azis Rachman¹, Jasmin², Ibadurrahman³, Eva Yuniarti Utami⁴

¹ Universitas Bina Mandiri Gorontalo

² IAIN Ternate

³ Universitas Indonesia Timur

⁴ Universitas Sebelas Maret

Article Info

Article history:

Received Apr, 2024

Revised Apr, 2024

Accepted Apr, 2024

Keywords:

Digital Economy Growth
Indonesia

Quantitative Analysis

Startup Incubator Development

Venture Capital Investment

ABSTRACT

This study examines the relationship between startup incubator development, venture capital investment, and digital economy growth in Indonesia through quantitative analysis. Utilizing a survey method, data was collected from stakeholders in the Indonesian startup ecosystem. Structural Equation Modeling (SEM) with Partial Least Squares (PLS) analysis was conducted to analyze the data and test the hypotheses. The results reveal significant positive relationships between startup incubator development, venture capital investment, and digital economy growth. These findings underscore the pivotal roles of startup incubators and venture capital in fostering digital innovation and economic development in Indonesia, providing valuable insights for policymakers, investors, and entrepreneurs aiming to nurture the growth of the digital economy.

This is an open access article under the [CC BY-SA](#) license.



Corresponding Author:

Name: Azis Rachman

Institution: Universitas Bina Mandiri Gorontalo

Email: azis.rachman@ubmg.ac.id

1. INTRODUCTION

Rapid technological advances and digital transformation have fuelled the emergence of the digital economy as a key driver of global economic growth, innovation and competitiveness. This shift towards digitalisation is evident in the increasing adoption of digital technologies by businesses, the integration of digital solutions across sectors, and the emergence of digital startups [1]–[5]. The digital economy, which is based on networks and information platforms, drives sustainable development through the application of new technologies

and innovative models. As countries around the world embrace digitalisation, they are experiencing major changes in business practices, emphasising the importance of digital management strategies, infrastructure development and talent development to thrive in the digital age. This transition underscores the critical role of digital technologies in reshaping industries, societies and economies towards a more innovative and interconnected future.

Indonesia's digital economy has grown rapidly due to several factors such as a supportive regulatory framework [6], government policies that encourage global

competitiveness for MSMEs [7], and a focus on digital innovation [8]. The startup ecosystem in Indonesia has grown rapidly, with legal challenges being addressed to facilitate growth [9]. Despite the growth, challenges such as cybersecurity threats and infrastructure limitations pose risks to national security [10]. Indonesian startups, ranging from e-commerce to fintech, have shown resilience and adaptability, contributing significantly to the expansion of the digital economy. Government initiatives to encourage digital literacy, infrastructure development, and innovation ecosystems are critical to sustaining this growth and ensuring Indonesia remains at the forefront of digital innovation in Southeast Asia.

Startup incubators play a pivotal role in fostering entrepreneurship by providing crucial resources, mentorship, and networking opportunities to early-stage ventures [11]. These support mechanisms help startups refine their business models, access markets, and ultimately secure funding [12]. On the other hand, venture capital funding serves as a vital financial resource that fuels the growth and scalability of startups, enabling them to innovate, expand operations, and compete globally [13]. The research emphasizes that venture capitalists consider various factors such as the founding team, startup traction, valuation, deal structure, and current investors when making investment decisions [14]. Together, these mechanisms of support from startup incubators and access to venture capital funding are essential for the success and sustainability of startups in today's competitive business landscape.

However, while the Indonesian startup ecosystem has made significant strides, several challenges and opportunities remain on the horizon. Understanding the intricate dynamics between startup incubator development, venture capital investment, and digital economy growth is essential for policymakers, investors, and entrepreneurs alike. By examining these relationships through a quantitative lens, this research seeks to shed light on the underlying

mechanisms driving digital economy growth in Indonesia.

The primary aim of this research is to investigate the relationship between startup incubator development, venture capital investment, and the growth of the digital economy in Indonesia. To achieve this aim, the following objectives will be pursued: firstly, examining the role of startup incubators in supporting the growth and success of digital startups in Indonesia; secondly, assessing the impact of venture capital investment on the scalability and innovation capabilities of Indonesian startups; thirdly, analyzing the correlation between startup incubator development, venture capital investment, and digital economy growth indicators in Indonesia; and finally, providing empirical insights and actionable recommendations for policymakers, investors, and entrepreneurs to foster a conducive environment for digital innovation and economic growth in Indonesia.

2. Literature Review

2.1 *Startup Incubators and Digital Economy Growth*

Startup incubators, especially in developing countries such as Indonesia, play an important role in fostering entrepreneurship and supporting the growth of digital startups. They provide a conducive environment for early-stage ventures to develop ideas, validate business models, and accelerate growth. Research emphasises the importance of business incubators in creating value for entrepreneurs through tangible and intangible resources, fostering entrepreneurial learning, collaboration, and legitimacy with external stakeholders [15]–[18]. Incubator-affiliated startups show higher survival rates and greater opportunities to attract external funding compared to independent operations [19]. The support provided by incubators, including physical infrastructure, networking,

financial assistance, and business mentorship, significantly contributes to the success and sustainability of startups in the competitive business landscape of developing countries.

2.2 Venture Capital Investment and Digital Economy Growth

Venture capital (VC) funding is a key driver of innovation and growth in the digital economy, providing startups with the financial resources needed to scale their operations and penetrate new markets. In Indonesia, venture capital investment has surged in recent years, driven by the rapid expansion of the digital economy and the emergence of high-potential startups across various sectors. Research indicates that VC-backed startups are more likely to achieve significant growth milestones, such as expanding their customer base, launching new products, and achieving profitability [20], [21]. Moreover, venture capital investment plays a crucial role in facilitating the transfer of knowledge, expertise, and best practices from seasoned investors to early-stage entrepreneurs. By aligning the interests of investors and entrepreneurs, venture capital funding incentivizes innovation and risk-taking, driving technological

advancements and market disruptions in the digital economy [12], [20], [22], [23].

2.3 The Indonesian Startup Ecosystem

The Indonesian startup ecosystem has witnessed rapid growth and evolution in recent years, propelled by factors such as demographic trends, increasing internet penetration, and favorable regulatory environments. The country's young and digitally-native population represents a vast market for digital products and services, creating opportunities for startups to innovate and scale rapidly [7], [24]–[26].

Government initiatives and policies aimed at fostering entrepreneurship and innovation have further catalyzed the growth of the Indonesian startup ecosystem. Programs such as tax incentives for startups, regulatory reforms to promote venture capital investment, and initiatives to improve digital infrastructure have created an enabling environment for startup formation and growth. As a result, Indonesia has emerged as a regional hub for digital innovation, attracting both domestic and international investors seeking opportunities in the rapidly expanding digital economy [7], [24]–[26].

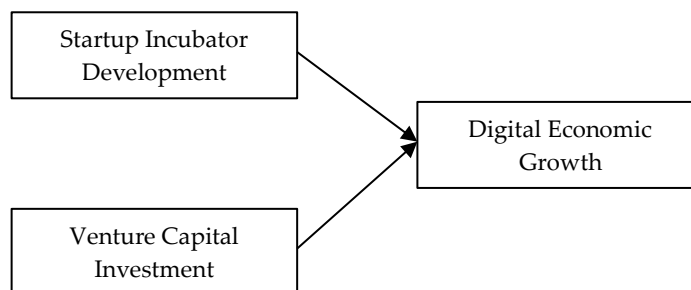


Figure 1. Conceptual Research Model

3. RESEARCH METHODS

3.1 Research Design

This study adopts a quantitative research design to

investigate the relationship between startup incubator development, venture capital investment, and digital economy growth in Indonesia.

The research employs a survey method to collect data from stakeholders within the Indonesian startup ecosystem. The survey instrument utilizes a Likert scale ranging from 1 to 5 to measure respondents' perceptions and attitudes towards various aspects of startup incubator development, venture capital investment, and digital economy growth.

3.2 Sampling Strategy

The sampling frame for this study includes individuals and organizations directly involved in the Indonesian startup ecosystem, including entrepreneurs, investors, incubator managers, and policymakers. A stratified random sampling technique will be employed to ensure representation from different sectors (e.g., e-commerce, fintech, logistics) and geographical regions across Indonesia. The target sample size for this study is 130 respondents, determined based on the principles of statistical power analysis to ensure sufficient statistical power for data analysis.

3.3 Survey Instrument

The survey instrument consists of structured questions designed to capture respondents' perceptions and experiences related to startup incubator development, venture capital investment, and digital economy growth in Indonesia. The questionnaire covers various dimensions, including:

- a. Perceived effectiveness of startup incubators in supporting entrepreneurship and innovation.
- b. Importance of venture capital investment in facilitating startup growth and scalability.
- c. Impact of government policies and regulatory frameworks on the Indonesian startup ecosystem.

- d. Outlook on the future growth prospects of the digital economy in Indonesia.

Respondents are asked to rate each item on a Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree), allowing for nuanced assessments of their attitudes and perceptions.

3.4 Data Collection

Data collection has been carried out using an online survey platform, which allows efficient data collection from a geographically dispersed sample of respondents. Participants will be contacted via email, social media platforms, and professional networks, with a request to complete a survey questionnaire. To increase response rates, reminders will be sent periodically throughout the data collection period, highlighting the importance of their input in contributing valuable insights to the Indonesian startup ecosystem.

3.5 Data Analysis

The survey data collected has been analyzed using Structural Equation Modeling (SEM) with the Partial Least Squares (PLS) algorithm, a statistical technique commonly used to investigate complex relationships between latent constructs. Likert scale responses will be treated as ordinal data and transformed appropriately for analysis in the SEM-PLS framework. The data analysis process consists of several main steps: first, Data Preprocessing, i.e. survey responses will be cleaned, coded and prepared, missing data and outliers will be handled using appropriate techniques. Secondly, Measurement Model Assessment will evaluate the reliability and validity of the survey instrument through measures such as Cronbach's alpha, assessing internal consistency, and tests for convergent and discriminant validity. Thirdly, Structural Model Estimation will

employ SEM-PLS to examine the relationships between startup incubator development, venture capital investment, and digital economy growth, elucidating both direct and indirect effects. Fourthly, Hypothesis Testing will scrutinize hypotheses derived from research objectives, assessing the significance and strength of variable relationships within the structural model. Lastly, Model Fit Assessment will evaluate the overall fit of the structural model to the data, utilizing goodness-of-fit measures like the R-squared value and standardized root mean square residual (SRMR).

4. RESULTS AND DISCUSSION

4.1 Results

a. Overview of the Sample

The survey was completed by 130 participants, who represented a range of stakeholders in the Indonesian startup ecosystem, such as politicians, investors, incubator managers, and entrepreneurs. To guarantee representation from various industries and geographical areas throughout Indonesia, the sample was stratified. With 45% (n = 58) of the respondents actively involved in creating and managing new companies across several economic sectors, entrepreneurs made up the largest portion of the sample. Venture capital firms, angel investors, institutional investors, and other investors that provide financial capital to startup businesses made up a sizable share of the sample (30 out of 39 respondents). 15% (n = 20) of the sample consisted of startup incubator managers, who were in charge of running the business with the goal of

assisting early-stage entrepreneurs by providing resources, networking opportunities, and mentorship. 10% (n = 13) of the sample consisted of legislators and other public servants who assist the startup ecosystem. They are vital in establishing laws and regulations that encourage innovation and entrepreneurship. Respondents came from a variety of Indonesian locations, including Bandung, Surabaya, Jakarta, and other developing startup hotspots. Bandung and Surabaya had the most percentage of respondents, but Jakarta had the largest percentage overall. The respondents reflected the complex character of the Indonesian startup ecosystem and the prospects for innovation across many industries by representing a varied range of sectors within the ecosystem, including e-commerce, fintech, healthtech, agritech, and edtech. Furthermore, the participants in the survey displayed diverse degrees of expertise in the startup ecosystem, which enhanced the viewpoints and understandings obtained from the analysis.

b. Measurement Model

The measurement model assessment provides valuable insights into the reliability and validity of the constructs under investigation: Startup Incubator Development (SID), Venture Capital Investment (VCI), and Digital Economic Growth (DEG). The results indicate satisfactory levels of reliability and validity for each construct, as evidenced by high composite reliability (CR) values, Cronbach's alpha (CA), and average variance extracted (AVE) scores.

Table 1. Validity and Reliability Indicators

Variable & Indicators	Items Indicators	Loading Factor	Source
Startup Incubator Development (SID)	CA = 0.890, CR = 0.920, AVE = 0.699.		1,3,4
SID.1	1. Number of startups entering the incubator	0.851	
SID.2	2. Number of successful startups	0.891	
SID.3	3. Ratio of the number of successful startups to the total number of startups	0.876	
SID.4	4. Number of successful startups in a particular sector	0.823	
SID.5	5. Ratio of the number of successful startups in a particular sector to the total number of startups in a particular sector	0.728	
Venture Capital Investment (VCI)	CA = 0.884, CR = 0.915, AVE = 0.683.		1,2,3,4,5
VCI.1	1. Amount of funds forwarded	0.843	
VCI.2	2. Number of VC investors	0.777	
VCI.3	3. Average number of VC investments per startup	0.877	
VCI.4	4. Ratio of the amount of VC investment to the total amount of investment	0.820	
VCI.5	5. Number of startups receiving VC investment	0.812	
Digital Economic Growth (DEG)	CA = 0.858, CR = 0.903, AVE = 0.700.		1,2,3,4,5
DEG.1	1. Number of internet users	0.803	
DEG.2	2. Progress in information and communications technology	0.853	
DEG.3	3. Communication and Information Technology Development Index	0.824	
DEG.4	4. Use of cloud computing services	0.866	

Source: Processing data analys (2024)

The constructs of Startup Incubator Development (SID), Venture Capital Investment (VCI), and Digital Economic Growth (DEG) demonstrate high levels of reliability and validity within the Indonesian startup ecosystem. For SID, the construct exhibits strong internal consistency reliability (CA = 0.890) and composite reliability (CR = 0.920), with an adequate average variance extracted (AVE) score of 0.699, and indicator loadings ranging from 0.728 to 0.891, indicating robust relationships between items and the latent construct. Similarly, VCI shows high reliability with a Cronbach's alpha of 0.884 and a composite reliability of 0.915, an AVE score of 0.683, and indicator loadings ranging from 0.777 to 0.877, effectively capturing dimensions of venture

capital investment such as fund allocation and investor participation. DEG also demonstrates strong reliability and validity, with a Cronbach's alpha of 0.858, a composite reliability of 0.903, an AVE score of 0.700, and indicator loadings ranging from 0.803 to 0.866, effectively measuring various aspects of digital economic growth, including technology adoption and internet usage trends. These findings collectively indicate that the measurement items adequately capture the multidimensional constructs under investigation, providing a robust basis for further analysis of their relationships and impacts on the Indonesian startup ecosystem.

c. Discriminant Validity

Discriminant validity assesses the extent to which different constructs in a research model measure distinct concept. It ensures that each construct is unique and not

redundant with others. The discriminant validity results presented in the correlation matrix show the correlations between each pair of constructs.

Table 2. Discriminant Validity research

Variable	Digital Economic Growth	Startup Incubator Development	Venture Capital Investment
Digital Economic Growth	0.737	-	-
Startup Incubator Development	0.676	0.736	-
Venture Capital Investment	0.424	0.741	0.826

Source: Processing data analys (2024)

The Digital Economic Growth (DEG) construct exhibits moderate to strong correlation coefficients with both Startup Incubator Development (SID) and Venture Capital Investment (VCI), at 0.737 and 0.676, respectively. These correlations suggest shared variance between DEG and the other constructs, yet discriminant validity is maintained as they do not exceed acceptable levels, indicating DEG measures a distinct concept from both SID and VCI. Conversely, SID shows moderate to strong correlations with DEG and VCI, at 0.736 and 0.741, respectively, with the correlation with

VCI not surpassing that with DEG, indicating discriminant validity is maintained as SID measures a concept distinct from both DEG and VCI. Similarly, VCI demonstrates moderate to strong correlations with DEG and SID, at 0.424 and 0.741, respectively, maintaining discriminant validity as it measures a unique concept from both DEG and SID, despite some shared variance between the constructs. These findings suggest that each construct captures distinct dimensions within the Indonesian startup ecosystem, supporting the validity of the measurement model.

Table 3. Inner VIF Model

	Digital Economic Growth
Startup Incubator Development	2.216
Venture Capital Investment	2.216

Source: Processing data analys (2024)

The Variance Inflation Factor (VIF) is a measure used to assess multicollinearity between independent variables in a regression analysis. A VIF value greater than 10 typically indicates high multicollinearity, suggesting that the independent variables are highly correlated with each other.

In this study, both Digital Economic Growth (DEG), Startup Incubator Development (SID), and Venture Capital Investment (VCI) have VIF values of 2.216. These values are well below the threshold of 10, indicating that there is no significant multicollinearity between these variables.

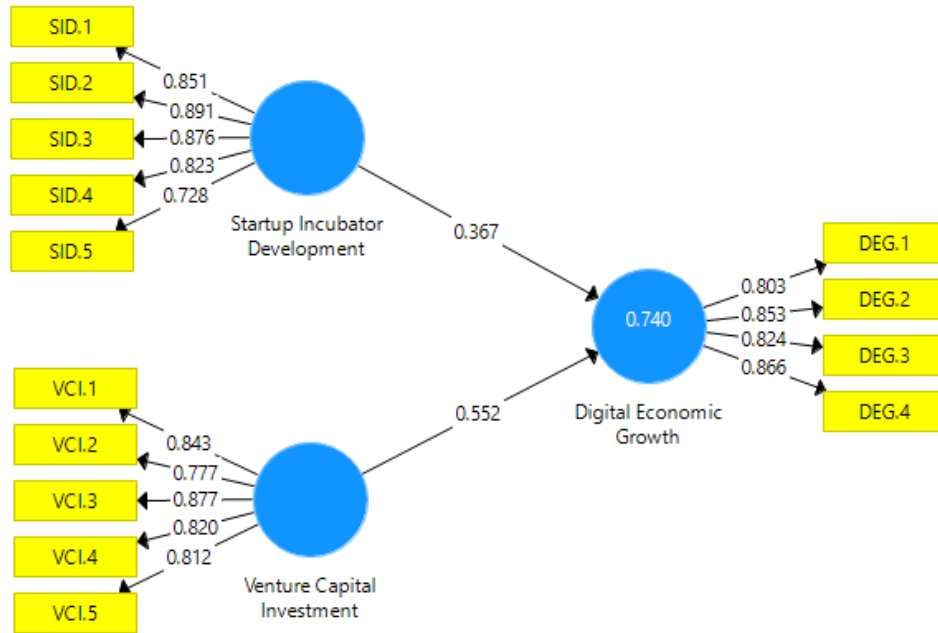


Figure 2. Model Internal Assessment
 Source: Data processed by researchers, 2024

d. Model Fit

The provided values pertain to the goodness-of-fit measures for both the Saturated Model and the Estimated Model in structural

equation modeling (SEM). These measures are crucial for assessing how well the models fit the observed data.

Table 4. GOF test Results

	Saturated Model	Estimated Model
SRMR	0.088	0.088
d_ ULS	0.818	0.818
d_ G	0.405	0.405
Chi-Square	292.736	292.736
NFI	0.806	0.806

Source: Processing data analys (2024)

The model fit indices provide insights into the adequacy of the structural equation model. The Standardized Root Mean Square Residual (SRMR) values for both the Saturated and Estimated Models, at 0.088, indicate a reasonably good fit, as they fall within the acceptable range below 0.10. Additionally, the discrepancy measures, d_ ULS and d_ G, sharing identical values of 0.818 in both models, suggest relatively good fit, though perfect fit is rare in practice. The Chi-Square statistic,

which is identical for both models at 292.736, may appear significant, yet SEM's sensitivity to sample size suggests that additional fit indices should be considered. The Normed Fit Index (NFI) values of 0.806 for both models indicate reasonable fit, though values closer to 1 are preferred, with those above 0.90 often considered indicative of good fit. Overall, while the model fit may not be optimal, the indices collectively suggest a reasonably good fit of the structural equation model to the data.

Table 5. R2 Test

	R Square	R Square Adjusted
Digital Economic Growth	0.744	0.736

Source: Processing data analys (2024)

The R-squared (R^2) and adjusted R-squared values offer valuable insights into the effectiveness of the structural model in explaining variance in Digital Economic Growth (DEG). The R-squared value of 0.744 indicates that approximately 74.4% of the variance in DEG is accounted for by startup incubator development and venture capital investment within the model. This suggests that these independent variables serve as strong predictors of DEG. The adjusted R-squared value, accounting for the number of predictors in the model, remains high at 0.736, reinforcing the robustness of the model's explanatory power. These findings collectively affirm the

structural model's ability to capture the relationships between startup incubator development, venture capital investment, and digital economic growth in Indonesia, providing valuable insights into the factors driving digital innovation and economic development in the country.

e. Hypothesis

The structural model analysis examined the relationships between startup incubator development, venture capital investment, and digital economy growth in Indonesia. The path coefficients and their significance levels were estimated using Partial Least Squares (PLS).

Table 6. Bootstrapping Test

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (O/STDEV)	P Values
Startup Incubator Development -> Digital Economic Growth	0.367	0.373	0.068	5.375	0.000
Venture Capital Investment -> Digital Economic Growth	0.552	0.548	0.069	8.051	0.000

Source: Processing data analys (2024)

The hypothesis testing results reveal compelling evidence supporting the significant positive relationships between Startup Incubator Development (SID) and Digital Economic Growth (DEG), as well as between Venture Capital Investment (VCI) and DEG in Indonesia. In the original sample, the coefficient estimates for SID-DEG and VCI-DEG relationships are 0.367 and 0.552, respectively, both exceeding the conventional significance level. T-statistics, calculated as the ratio of coefficient estimates to standard

deviations, yield values of 5.375 for SID-DEG and 8.051 for VCI-DEG, well above critical values. Correspondingly, p-values for both relationships are insignificantly low (0.000), indicating the improbability of observing such strong associations by random chance. These findings underscore the pivotal roles of startup incubators and venture capital investment in propelling digital economic growth, emphasizing the significance of supportive ecosystems and financial resources for nurturing innovation

and entrepreneurship within the digital economy landscape of Indonesia.

4.2 Discussion

The findings of this study provide valuable insights into the relationships between startup incubator development, venture capital investment, and digital economy growth in Indonesia. The discussion below explores the implications of these findings and their significance for policymakers, investors, and entrepreneurs.

a. Relationship between Startup Incubator Development and Digital Economy Growth

The significant positive relationship between startup incubator development and digital economy growth underscores the importance of supportive ecosystems for fostering innovation and entrepreneurship. Startup incubators are critical in providing resources, mentorship, and networking opportunities to early-stage ventures, facilitating their growth and contribution to economic development [15], [17]–[19], [27]. These incubators are critical in fostering entrepreneurship, especially in the context of an ever-evolving global economy fuelled by technological advancements. Policymakers should prioritise initiatives that support the establishment and expansion of startup incubators to foster a robust entrepreneurial ecosystem conducive to digital innovation. By offering tangible and intangible resources, incubators create value for entrepreneurs, aid business development, foster collaboration, and increase legitimacy with external stakeholders. Such initiatives are critical to promoting innovative

startups, fostering economic growth, job creation, poverty alleviation and wealth creation.

b. Relationship between Venture Capital Investment and Digital Economy Growth

The significant positive relationship between venture capital investment and digital economy growth highlights the critical role of financial resources in driving innovation and expansion within the startup ecosystem. Venture capital funding plays a pivotal role in enabling startups to secure the necessary capital for product development, market expansion, and talent acquisition, thereby fueling their growth trajectory [12], [28], [29]. Investors and policymakers should prioritize facilitating access to venture capital funding by implementing incentives, regulations, and initiatives aimed at attracting investments to sectors like the digital economy. Venture capitalists bring industry expertise, mentorship, and connections to startups, enhancing their chances of success in today's fast-paced, technology-driven market. Research indicates that VC finance positively impacts innovation and overall performance, making it a crucial driver of economic growth and innovation. By focusing on enhancing access to venture capital, stakeholders can further stimulate entrepreneurial activity and foster the transformation of innovative ideas into successful enterprises.

4.3 Implications for Policymakers

Policymakers play a central role in shaping the regulatory environment and implementing policies that support the growth of

the digital economy. The findings of this study underscore the importance of creating an enabling environment for startups and venture capital investment through supportive policies, incentives, and infrastructure development. Initiatives such as tax incentives for investors, streamlined regulatory processes, and investment in digital infrastructure can foster a conducive ecosystem for digital innovation and economic growth.

4.4 *Implications for Investors*

Investors seeking opportunities in the Indonesian digital economy should recognize the potential for growth and innovation in the startup ecosystem. The significant positive relationships identified in this study suggest that investments in startup incubators and ventures with high-growth potential can yield substantial returns and contribute to the development of the digital economy. Investors should prioritize sectors with strong growth prospects, such as e-commerce, fintech, and digital services, and actively engage with startups to provide strategic guidance and support.

4.5 *Implications for Entrepreneurs*

Entrepreneurs operating in the Indonesian startup ecosystem can leverage the findings of this study to strategically position their ventures for growth and scalability. Access to startup incubators and venture capital funding can significantly enhance the prospects of success for early-stage ventures. Entrepreneurs should actively seek opportunities to collaborate with incubators, investors, and industry stakeholders to access resources, expertise, and funding needed to drive innovation and accelerate growth.

4.6 *Future Research Directions*

While this study provides valuable insights into the

relationships between startup incubator development, venture capital investment, and digital economy growth in Indonesia, there are several avenues for future research. Longitudinal studies tracking the evolution of the startup ecosystem over time could provide deeper insights into the dynamics shaping digital economy growth. Additionally, comparative studies across different countries or regions could offer valuable insights into the factors driving digital innovation and economic development in diverse contexts.

5. CONCLUSION

In conclusion, this research highlights the critical importance of startup incubators and venture capital investment in driving digital economy growth in Indonesia. The significant positive relationships identified between startup incubator development, venture capital investment, and digital economy growth underscore the need for concerted efforts to promote these aspects of the startup ecosystem. Policymakers should focus on creating supportive environments conducive to startup incubation and facilitating access to venture capital funding. Similarly, investors and entrepreneurs should recognize the potential of these factors in driving digital innovation and economic development, making strategic investments to capitalize on emerging opportunities in the Indonesian digital economy. By leveraging these insights, stakeholders can contribute to the sustainable growth and competitiveness of Indonesia's digital ecosystem, positioning the country as a key player in the global digital economy landscape.

Although this study identifies a correlation between startup incubator development, venture capital investment, and digital economic growth, it may not fully capture the complex causal relationships and underlying mechanisms that drive these dynamics. Acknowledging these limitations can provide valuable context for interpreting

findings and guide future research efforts aimed at addressing these challenges for a

more comprehensive understanding of the topic.

REFERENCES

- [1] K. Verhal, "Digital economy as a driver of business development," pp. 390–394, 2023, doi: 10.53486/icspm2022.61.
- [2] S. Tkachenko, "Prospects For The Development Of The Digital Economy In The Global Space," *Econ. Horizons*, pp. 101–109, Jun. 2023, doi: 10.31499/2616-5236.2(24).2023.281234.
- [3] S. Achar, K. Vijayendra, S. Hussain, A. Kejriwal, and A. Kejriwal, "Business Trends in Digital Era: A Review," *J. Eng. Res. Reports*, pp. 328–338, Dec. 2022, doi: 10.9734/jerr/2022/v23i12788.
- [4] A. Mottaeva, Z. Khussainova, and Y. Gordeyeva, "Impact of the digital economy on the development of economic systems," *E3S Web Conf.*, vol. 381, 2023, doi: 10.1051/e3sconf/202338102011.
- [5] H. Jiang, "Research on the Impact and Countermeasures of The Digital Economy Era on The Development of Real Enterprises," *Front. Business, Econ. Manag.*, vol. 9, pp. 43–46, May 2023, doi: 10.54097/fbem.v9i1.8286.
- [6] T. Anas and E. Cahyawati, "Strategic Investment Policies for Digital Transformation," *J. Southeast Asian Econ.*, vol. 40, no. 1, pp. 96–126, Apr. 2023, [Online]. Available: <https://www.jstor.org/stable/27211226>
- [7] H. Haqqi, "The Government's Policy in Encouraging the Global Competitiveness of Indonesian MSMEs through the Digital Ecosystem," *J. Econ. Manag. Trade*, vol. 29, no. 8, pp. 66–76, 2023, doi: 10.9734/JEMT/2023/v29i81115.
- [8] P. Putera, S. Ningrum, S. Suryanto, I. Widianingsih, and Y. Rianto, "Digital Economy in Indonesia: Trends and Future Research," *J. Sci. Technol. Innov. Policy*, vol. 8, pp. 1–11, Jan. 2023, doi: 10.11113/jostip.v8n2.117.
- [9] I. N. H. Laksmana and I. P. H. Permana, "Legal Challenges for Digital Startup Development in Indonesia," *J. Digit. Law Policy*, vol. 2, no. 2, pp. 71–80, 2023, doi: 10.58982/jdlp.v2i2.312.
- [10] P. A. Sapulette, M.S.,; Muchtar, "Redefining-Indonesia's-Digital-Economy," *Res. Inst. ASEAN East Asia*, vol. 06, no. ISSN: 2086-8154, pp. 1–5, 2023, [Online]. Available: <https://www.eria.org/uploads/media/policy-brief/FY2022/Redefining-Indonesia's-Digital-Economy.pdf>
- [11] Z. Zhou, "The Impact of Key Factors on the Success of Venture Capital Investment," *Highlights Business, Econ. Manag.*, vol. 15, pp. 182–187, Jun. 2023, doi: 10.54097/hbem.v15i.9338.
- [12] D. R. Sangani, "A study on analysis of venture capital financing," *J. Manag. Res. Anal.*, vol. 10, no. 2, pp. 124–127, 2023, doi: 10.18231/j.jmra.2023.021.
- [13] A. Parhankangas, "The economic impact of venture capital," in *Handbook of Research on Venture Capital*, 2012. doi: 10.4337/9781781009116.00014.
- [14] P. Kumar, A. Farooq, and R. Krishnan, "Critical Success Factors & Fundability of Indian Startups: Insights from Key-Decision Makers of Indian Startup-Ecosystem," 2023, pp. 763–772. doi: 10.52458/978-81-95502-00-4-75.
- [15] M. Annas and V. Meilinda, "A Review of Indonesian Business Start-Up Incubator Models," *Startuppreneur Bus. Digit. (SABDA Journal)*, vol. 2, no. 1 SE-Articles, pp. 86–97, Feb. 2023, doi: 10.33050/sabda.v2i1.260.
- [16] A. Bist, "The Importance of Building a Digital Business Startup in College," *Startuppreneur Bus. Digit. (SABDA Journal)*, vol. 2, pp. 31–42, Feb. 2023, doi: 10.33050/sabda.v2i1.265.
- [17] C. Nicholls-Nixon, D. Valliere, R. Singh, and Z. Hassannezhad, "How incubation creates value for early-stage entrepreneurs: the People-Place nexus," *Entrep. Reg. Dev.*, vol. 34, pp. 1–22, Sep. 2022, doi: 10.1080/08985626.2022.2121858.
- [18] F. Rifai, H. Almimi, M. Rasmi, and A. Aldahoud, "The Role of Business Incubators in Promoting Entrepreneurship of Higher Education Institutions," *Financ. Eng.*, vol. 1, pp. 289–299, Jul. 2023, doi: 10.37394/232032.2023.1.27.
- [19] D. Siddiqui and N. Ahmad, "Study of Support and Services Provided by Business Incubators in Entrepreneurship," *AMC Indian J. Entrep.*, vol. 5, p. 19, Jun. 2022, doi: 10.17010/amcije/2022/v5i2/171467.
- [20] C. N. Miraza and E. R. Shauki, "The Effect of Venture Capital on the Growth of Startups in Indonesia: A Case Study on BRI Ventures," *J. Econ. Business, Account. Ventur.*, vol. 25, no. 3 SE-Articles, pp. 358–368, Feb. 2023, doi: 10.14414/jebav.v25i3.2927.
- [21] S. Aparisi Torrijo and G. Ribes Giner, "Entrepreneurial leadership factors: a bibliometric analysis for the 2000-2020 period," 2022.
- [22] M. Sofia, F. Tan, N. Bachtiar, and F. P. Putra, "The Influence of Venture Capital on Growth through Innovation and the Use of Internet Technology in Micro and Small Industries (MSIs) in Indonesia," *Economies*, vol. 10, no. 12. 2022. doi: 10.3390/economies10120292.
- [23] S. Samila and O. Sorenson, "Venture Capital, Entrepreneurship, And Economic Growth," *Rev. Econ. Stat.*, vol. 93, no. 1, pp. 338–349, Apr. 2011, [Online]. Available: <http://www.jstor.org/stable/23015937>
- [24] S. P, "The Effect Of Company Size, Profitability, Economic Growth Rate, Market Traction And Competitive Advantage On Startup Valuation In Logistics Aggregators," *Am. J. Econ. Manag. Bus.*, vol. 2, pp. 164–174, May 2023, doi: 10.58631/ajemb.v2i5.34.
- [25] H. Rosidanti Susilatun, A. Widjayanti, and A. Inarto, "Digitalization in Indonesian Creative Economy Community," *KuE Soc. Sci.*, vol. 2023, pp. 208–218, 2023, doi: 10.18502/kss.v8i11.13548.
- [26] R. Stevy, I. Puspa, D. Widjaja, and R. Ongsa, "Analysis of Internal Factors for Improving the Performance of Startup Companies in Medan, Indonesia," *J. Madani Soc.*, vol. 2, no. 1 SE-Articles, pp. 67–74, Apr. 2023, doi: 10.56225/jmsc.v2i1.179.

- [27] N. Sultana and N. Gupta, "Supportive Policy Intervention in Incubating Innovative Enterprises for the Creation of a Self-Reliant Economy," *FII B Bus. Rev.*, p. 231971452311622, Apr. 2023, doi: 10.1177/23197145231162247.
- [28] J. Greenwood, P. Han, and J. M. Sánchez, "Venture Capital: A Catalyst for Innovation and Growth," *Fed. Reserv. Bank St. Louis Rev.*, vol. 104, no. 2, pp. 1–12, 2022, doi: 10.20955/r.104.120-30.
- [29] N. S. Moirangthem and B. Nag, "Value-added Activities of Venture Capitals in Entrepreneurial Finance: Evidence from the Growth of Flipkart," *Asian J. Manag. Cases*, vol. 21, no. 1, pp. 57–68, Apr. 2021, doi: 10.1177/0972820121998120.