



Optimizing Indonesian Entrepreneurial Performance Through Ecosystem Model

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ABSTRACT

Entrepreneurial performance is critical to a country's economic development, and the entrepreneurial ecosystem is essential in driving growth. This study investigates how various ecosystem components interact and influence business performance in Indonesia. Through a literature review, this paper examines relevant ecosystem models that impact entrepreneurial performance. These findings reveal the positive impact of various factors such as policy, education, culture, human resources, financing, markets, and support on entrepreneurial performance in Indonesia. This holistic approach aims to improve entrepreneurship performance in Indonesia to contribute significantly to business continuity. This study also offers recommendations for cultivating a conducive entrepreneurial ecosystem.

Keywords: Entrepreneurial ecosystem, entrepreneurial performance, Indonesian entrepreneurs, entrepreneurship, ecosystem

1. INTRODUCTION

Entrepreneurship is vital to the world's economy. Some developed countries agree that entrepreneurship development is essential for now (Laily, 2022). In addition, entrepreneurship is a way for the government to improve sustainable development and the economy (Prieger et al., 2016). Along with the development and changes of the times, entrepreneurship has experienced many changes, especially in policies. The focus of development policy is more qualitative or in terms of the quality of these entrepreneurs rather than quantitative or a large number of entrepreneurs. This is the main principle for the government in encouraging the entrepreneurial ecosystem (Shania & Dewobroto, 2022).

Eddy & Soegoto (2017) stated that entrepreneurship contributes significantly to society in Indonesia. Entrepreneurship becomes a significant player in the entrepreneurial ecosystem, not only resulting from the entrepreneurial ecosystem. In the entrepreneurial ecosystem, many factors work together to improve entrepreneurial performance and start new ventures (Ratten, 2020). However, conventional perspectives on entrepreneurship and innovation must change if we are to make progress in the entrepreneurial ecosystem. This shows that new approaches and perspectives are needed to make significant changes in the entrepreneurial environment, focusing on collaboration, social and environmental impact, and sustainable business. Therefore, each country must assess best practices and create an entrepreneurial ecosystem that suits its economic, social, and cultural conditions (Arruda et al., 2015).

With the fourth largest population in the world, Indonesia needs stable and sustainable economic growth. Entrepreneurship plays a vital role in driving the economic development of every country. According to Ministry of Cooperatives and SMEs data, MSMEs (Micro, Small, and Medium Enterprises) are the most significant contributor to Indonesia's GDP, contributing Rp9,580 trillion. The 2023 Ministry of Cooperatives and SMEs report shows that Indonesia's ratio of entrepreneurs is 3.47%. This is very low compared to neighboring countries such as Thailand, which is more than 4%, and Singapore, which is more than 8% (Desak et al., 2022). Indeed, entrepreneurship is vital to Indonesia's economic growth, but this figure is considered insufficient for a large country like Indonesia. As much as 97% of jobs in Indonesia come from entrepreneurs, conveyed by the President of the Republic of Indonesia, Joko Widodo, at the BRI Microfinance Outlook 2024 event (Sekretaris Kabinet, 2024). Government policies play an essential role in shaping the entrepreneurial ecosystem in Indonesia. Governments can help local startups thrive by providing funding, infrastructure, and an environment that supports entrepreneurship. In this case, the government can be a catalyst for supporting the growth of Indonesia's dynamic and sustainable entrepreneurial ecosystem.

This research focuses on the ecosystem model in improving entrepreneurial performance in Indonesia by looking at models that are suitable for the entrepreneurial ecosystem in Indonesia. This study aims to discover how the various components in the entrepreneurial ecosystem interact with each other and how they impact business performance. It is essential to support the growth and success of entrepreneurs with a deep understanding of the mechanisms and strategies that function in an entrepreneurial environment. It represents the latest advance in this research and offers novelty in assessing relevant entrepreneurial ecosystem models in Indonesia.

2. LITERATURE REVIEW

The term “ecosystem” is increasingly used in the strategy and entrepreneurship literature. It typically refers to the flow of interdependent resources and networks that create shared value (Leendertse et al., 2022). In entrepreneurship, the term ecosystem was first introduced by Daniel Isenberg with the term "Entrepreneurial Ecosystem" in his work "How to Start an Entrepreneurial Ecosystem," which was later updated in his article published in 2011 in the Institute of International European Affairs. An entrepreneurial ecosystem is a collection of people working in entrepreneurship, including potentially and already employed organizations such as companies and venture capital, institutions such as universities, and business processes such as entrepreneurial birth rates (Isenberg, 2016). Easy market access, availability of labor, capital, policies and regulations, education and training systems, incubators, mentors, consultants, and socio-cultural support are some of the components of the entrepreneurial ecosystem. Daniel Isenberg also offers it in a concept model, as shown in the image below.

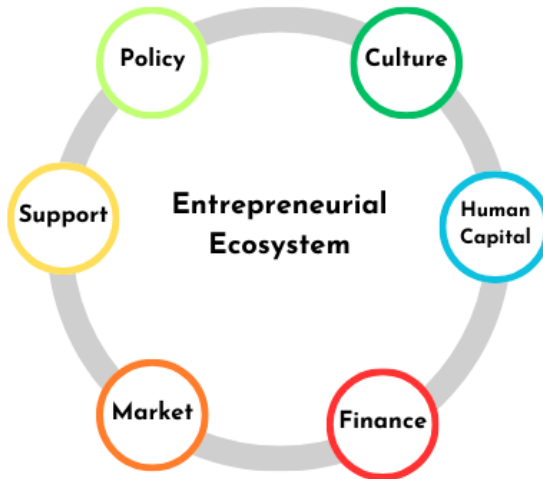


Figure 1: Components of the Entrepreneurial Ecosystem.

Source: Isenberg, 2011.

Other opinions about the entrepreneurial ecosystem differ from Isenberg's. Every flourishing ecosystem consists of six elements. First, there needs to be an environment that encourages entrepreneurship. Things like tolerance for risk and uncertainty, creativity, and the ability to try new ideas are essential. Second, human resources entrepreneurs and other skilled human resources—must be on site. The experience and knowledge of these individuals vary depending on whether they want to be leaders or followers (Spigel, 2020). Third, there needs to be an educational institution that allows people to share information. Fourth, knowledge-intensive industries must have extensive social networks enabling continuous communication. It accelerates knowledge exchange between individuals and organizations, making it essential for developing new ideas. Fifth, a new business must have

available capital. Sixth, to help startup businesses grow, the government must make the right policies. This can be done in a technology park or incubator.

As essential for business continuity, entrepreneurial performance is critical to maintaining entrepreneurial resilience in the contemporary era. Business performance is an important term in entrepreneurship (Maltz et al., 2003). A report from the Aspen Network of Development Entrepreneurs (ANDE) states that entrepreneurial performance includes specific actions entrepreneurs take and how they impact economic growth, new business formation, and poverty reduction. It is challenging to measure entrepreneurial performance; to do so, data must be carefully collected (Beaton et al., 2009). Entrepreneurial performance consists of innovation, renewal, creation of new ventures, and social success, according to (Nordqvist & Zellweger, 2010). Monteferrante and Pinango (2011) state that it includes components that are not only economic and monetary (such as profits and return on investment) but also non-economic and non-monetary (such as business survival and the number of employees) (Patricia & Piñango, 2011). Grande et al. (2011) stated that entrepreneurial performance increases sales, market share, and profit.

According to the 2023 GEM Report, the entrepreneurial ecosystem comprises cultural, social, economic, and political components. In addition, individuals involved in entrepreneurship depend on their characteristics and social values. Entrepreneurial activity increases value or job creation, leading to greater social and economic progress. Therefore, the entrepreneurial ecosystem has unique characteristics and many variables that affect its development in each location. The following table describes the components of the entrepreneurial ecosystem, which previous researchers also described.

Table 1: Factors present in previous research

Research Title	Name and Year of Research	Factor
Entrepreneurial Ecosystem and Performance in Iran	Davari, A., & Najmabadi, A. D. (2018)	Research and development, human resources, finance, markets, infrastructure, culture, and policy.
Entrepreneurial ecosystems and regional policy. In: Sage handbook for entrepreneurship and small business. Sage, London.	Stam and Spiegel (2015)	Government, business clusters, networks, and entrepreneurship support.
The Brazilian Entrepreneurial Ecosystem of Startups: An Analysis of Entrepreneurship	Arruda et al. (2015)	Markets, culture, human resources, public and private institutions, policy and law, and public universities.

Research Title	Name and Year of Research	Factor
Determinants in Brazil and the Perceptions Around the Brazilian Regulatory Framework. In Entrepreneurship in BRICS.		
Developing successful entrepreneurial ecosystems: lessons from comparing an Asian tiger and a Baltic tiger. <i>Balt J Manag</i> 9(3):330–356	Kshetri (2014)	Corporate governance, values and culture, entrepreneurial skills, research and development, technology, financial market development, market access
The entrepreneurship ecosystem strategy as a new paradigm for economic policy: principles for cultivating entrepreneurship. Presentation at the Institute of International and European Affairs, Dublin, Ireland.	Isenberg (2011)	Government, culture, human resources, financial capital, markets, policies, and support.

3. METHODOLOGY

This research uses a literature study approach to get an overview of ecosystem models that affect entrepreneurial performance. This article examines relevant research journals, studies, dissertations, and mass media. This research looks at the components of entrepreneurship that form a suitable ecosystem model for Indonesia.

4. DISCUSSION

Looking at some literature about the entrepreneurial ecosystem worldwide, several countries have their factors in the entrepreneurial ecosystem. The following comparison table can prove this.

Table 2. Ecosystem Factors in Several Countries

Country	Factors of the Entrepreneurial Ecosystem	Number of impacting factors
Iran	Research and development, human resources, finance, markets, infrastructure, support, culture, and policy.	8
Brazil	Markets, culture, human resources, public and private institutions, policy and law, and public universities.	6
United State	Government, culture, human resources, financial capital, markets, policies, and support.	7
United Kingdom	Government, business clusters, networks, and entrepreneurship support.	4

Looking at the table above, we can compare each country’s entrepreneurial ecosystem factors. The country with the most factors is Iran, which has eight factors that affect the ecosystem. The country with the fewest factors is the United Kingdom, which has only four factors. This number shows that each country has its uniqueness and characteristics in the entrepreneurial ecosystem in its country. Spigel (2020), also stated that each country has its entrepreneurial ecosystem factors dynamically and complexly.

Based on the background discussion above, it is essential to research every factor that affects the performance of entrepreneurs. Some critical factors in the entrepreneurial ecosystem in Indonesia are policies, support, markets, human resources, culture, education, and financing. Below will be discussed such factors.

2.1. Policy

Entrepreneurship depends on policy. The government is heavily involved in policy-making and determination. Responsible policies and laws encourage entrepreneurship and facilitate entry. The economic and political circumstances under which entrepreneurship emerged include significant political and legal elements. Isenberg (2011) states that many governments adopt sensible regulations to create entrepreneurial ecosystems; since governments cannot build ecosystems independently, the deregulation process must be carried out in collaboration with other sectors, such as communities and educational institutions.

Therefore, the government is reducing some laws or regulations to improve the entrepreneurial ecosystem and encourage other sectors to participate. In addition, research shows that national governments and laws should accelerate and facilitate business growth and create an environment that supports mergers to improve entrepreneurial performance (Isenberg, 2016). Considering research theory, we can see that policies can positively affect entrepreneurial performance.

2.2. Human Resources

Human resources must exist in economic development and entrepreneurship and are the key to success. Excellent and ready-to-operate human resources are essential, and institutions such as schools and communities play an important role. As a result, human resources are necessary to develop and expand entrepreneurship. This can affect the growth rate of entrepreneurship and the country's growth rate (Stam & van de Ven, 2021). Some of the research above thoroughly explains that human resources are essential in entrepreneurship. Therefore, a common thread can be drawn that human resources impact entrepreneurial performance.

2.3. Market

The market is where entrepreneurs get information about many market issues and feedback on the innovation and marketing of their products (Arruda et al., 2015; Isenberg, 2011). These include international and domestic markets. Gaining access to the local market is essential in a business environment. According to the World Economic Forum (2019), customers must create new business opportunities. According to Spigel (2020), meeting customer needs encourages entrepreneurs to build networks that help them acquire technology and market knowledge, access to resources such as investment, and access to consumers and suppliers. As a result, this network allows businesses to do better. Based on the explanation of the theory above, the market is the main gateway for entrepreneurs to reach consumers and connections. The market has a positive impact on entrepreneurial performance.

2.4. Support

Entrepreneurship programs can address problems and accelerate entry into the innovation market by providing ongoing technical and managerial support to the entrepreneurial ecosystem (Stam & van de Ven, 2021). Consulting, or mentoring, helps employers gain skills, access to formal education such as college, communication networks and cooperation between employers and other communities, and professional services such as consulting, finance, and law are some examples of actions that can help shape entrepreneurial ecosystems (Spigel, 2020). Meanwhile, we can divide supporting factors into technical and non-technical support. The theories above explain that support is vital to entrepreneurial performance (Rukmana et al., 2023).

2.5. Culture

Culture is an integral part of the entrepreneurial ecosystem and the improvement of entrepreneurial performance (O'Connor et al., 2018). The need to determine widely and profoundly acceptable behavior is influenced by cultural factors (Setiadi, 2019). Kotler and Keller (2021) state that culture is the values, beliefs, behaviors, and habits that thoroughly explain members and are passed down from generation to generation. Risk tolerance and failure rates, encouraging success stories and self-employment, supporting innovation, and instilling a positive impression of entrepreneurship are standard cultural components. As a country with a rich culture, culture certainly has a vital role in the entrepreneurial ecosystem. In addition, theories about culture have become our benchmark for determining that culture positively impacts entrepreneurial performance.

2.6. Finance

Access to financial resources is essential for business development and entrepreneurial performance (Stam, 2015). Development funds, entrepreneurial networks, and public and private investment associations are crucial components of financing (Isenberg, 2016). According to the Ministry of Cooperatives and SMEs, several financial factors that influence the growth of the entrepreneurial ecosystem include stock market accessibility, venture capital, loans, individual investors, and venture capital. In addition, many entrepreneurs and small and medium businesses (SMEs) use bank loans to get money (KemenkopUKM, 2023). Financing is indeed another essential thing for entrepreneurs. Supporting theories also explain that the presence of financing factors increases entrepreneurial performance.

2.7. Education

Education in entrepreneurship is critical to be obtained through informal and formal education. In addition, according to GEM (Global Entrepreneurship Monitor), "Individuals with higher levels of education tend to have more of the knowledge and skills necessary to start and manage a business successfully" (Hill et al., 2023). Sasana (2021) says that education can help people acquire the knowledge and skills to start and manage a business successfully. Education about entrepreneurship is indeed fundamental to all existing factors (Kamilla et al., 2021). In addition to entrepreneurship education in Indonesia, which only formally existed in 2014, with Agung Podomoro University and Bandung Institute of Technology as pioneer campuses in Indonesia, basic knowledge about entrepreneurship and mindset must continue to be improved in Indonesia. It is also clear that education affects entrepreneurial performance.

Based on the theory of factors that exist in Indonesia, ranging from policies, education, culture, human resources, financing, markets, and supports, it positively impacts entrepreneurial performance in Indonesia. Factors that distinguish Indonesia from other countries are Education and Support. Some other factors already exist in several different countries. These factors contribute to entrepreneurial performance increasing quantitatively and qualitatively.

The combination of several determinants creates an entrepreneurial ecosystem that aims to improve the performance of entrepreneurs in Indonesia. Entrepreneurial performance and

the entrepreneurial ecosystem are also interconnected in increasing entrepreneurship in Indonesia. Apart from the differentiators of the two factors that have been explained, the other seven factors also make the Indonesian ecosystem unique and have characteristics that show entrepreneurship in Indonesia. These factors form a model of the entrepreneurial ecosystem shown in Figure 2. By increasing understanding and application to the entrepreneurial ecosystem, entrepreneurial performance is also improved. This is because what entrepreneurs do on entrepreneurial ecosystem factors will improve their performance. Therefore, more comprehensive research is needed on factors and indicators directly affecting entrepreneurial performance.

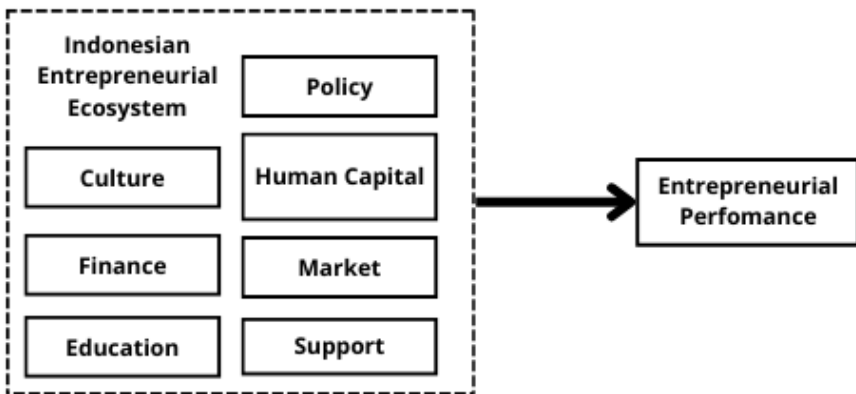


Figure 2: Indonesian Ecosystem Model.

5. CONCLUSION AND RECOMMENDATION

This study identifies factors in the entrepreneurial ecosystem to support entrepreneurial performance. Looking at the discussions that have been held about the aspects of the entrepreneurial ecosystem in several countries, we can draw a common thread that each country has a unique approach to building its entrepreneurial ecosystem. By comparing ecosystem factors carried out by Iran, Brazil, the United States, the United Kingdom, and Indonesia, although each country has a different combination of factors, all existing factors play a crucial role in supporting entrepreneurship.

Unlike other countries, Indonesia has factors that support the entrepreneurial ecosystem: policy, education, culture, human resources, finance, and support. In addition, there are two differentiating factors, namely support and education. These factors show Indonesia's commitment to increasing entrepreneurship through factors such as entrepreneurship in Indonesia.

Several recommendations are deemed necessary to encourage the entrepreneurial ecosystem in Indonesia. First, an entrepreneurial understanding of how the entrepreneurial ecosystem must be improved through in-depth research and up-to-date data. This provides a strong foundation for policymaking and initiatives. Meanwhile, it is essential to collaborate and share information between stakeholders and communities to strengthen

understanding of entrepreneurial ecosystem factors that affect entrepreneurial performance. However, it is also worth emphasizing that the importance of entrepreneurial ecosystem factors can give entrepreneurs an idea of what to consider when building a business.

REFERENCES

- Ande. (2013). *Entrepreneurial Ecosystem Diagnostic Toolkit. Aspen Network of Development Entrepreneurs, December.*
- Arruda, C., Nogueira, V. S., Cozzi, A., & Costa, V. (2015). The Brazilian Entrepreneurial Ecosystem of Startups: An Analysis of Entrepreneurship Determinants in Brazil and the Perceptions Around the Brazilian Regulatory Framework. In *Entrepreneurship in BRICS*. https://doi.org/10.1007/978-3-319-11412-5_2
- Beaton, D., Bombardier, C., Escorpizo, R., Zhang, W., Lacaille, D., Boonen, A., Osborne, R. H., Anis, A. H., Strand, C. V., & Tugwell, P. S. (2009). Measuring worker productivity: Frameworks and measures. *Journal of Rheumatology*, 36(9). <https://doi.org/10.3899/jrheum.090366>
- Davari, A., & Najmabadi, A. D. (2018). Entrepreneurial ecosystem and performance in Iran. In *Contributions to Management Science*. https://doi.org/10.1007/978-3-319-75913-5_8
- Desak, O., Sriary Bhegawati, A., Ribek, P. K., & Verawati, Y. (2022). PEMBANGUNAN EKONOMI DI INDONESIA MELALUI PERAN KEWIRAUSAHAAN. *JISOS: JURNAL ILMU SOSIAL*, 1(1).
- Eddy, I. H., & Soegoto, S. (2017). Dr. Ir. H. Eddy Soeryanto Soegoto. *TREN KEPEMIMPINAN Kewirausahaan Dan Manajemen Inovatif Di Era Bisnis Modern.*
- Grande, J., Madsen, E. L., & Borch, O. J. (2011). The relationship between resources, entrepreneurial orientation and performance in farm-based ventures. *Entrepreneurship and Regional Development*, 23(3–4). <https://doi.org/10.1080/08985620903183710>
- Hill, S., Ionescu-Somers, A., & Coduras, A. (2023). *GEM 2023/2024 Global Report*. <http://www.witchwoodhouse.com>
- Isenberg, D. J. (2011). The Entrepreneurship Ecosystem Strategy as a New Paradigm for Economic Policy. *Institute of International and European Affairs*, 1(781).
- Isenberg, D. J. (2016). Applying the ecosystem metaphor to entrepreneurship: Uses and abuses. *Antitrust Bulletin*, 61(4). <https://doi.org/10.1177/0003603X16676162>
- Kamilla, S., Sasana, H., Sugiharti, R. R., & Ekonomi, F. (2021). PENGARUH TEKNOLOGI INFORMASI DAN KOMUNIKASI TERHADAP PERTUMBUHAN EKONOMI DI INDONESIA TAHUN 2012-2019. *DINAMIC : Directory Journal of Economic*, 3(2).
- KemenkopUKM. (2023, September 27). *Entrepreneur Hub Jakarta : Meet The Investor "Upgrade and Connect, Let's Match Your Success."* KemenkopUKM.

<https://ehub.kemenkopukm.go.id/news/entrepreneur-hub-jakarta-meet-the-investor-upgrade-and-connect-lets-match-your-success>

- Kotler, P., & Keller, K. L. (2021). Marketing Management MARKETING MANAGEMENT Marketing Management. In *Pearson Practice Hall*.
- Kshetri, N. (2014). Developing successful entrepreneurial ecosystems: Lessons from a comparison of an Asian tiger and a Baltic tiger. *Baltic Journal of Management*, 9(3). <https://doi.org/10.1108/BJM-09-2013-0146>
- Laily, I. N. (2022, January 19). *Kewirausahaan: Pengertian, Karakteristik, Tujuan, Tahapan, dan Modal*. Katadata. <https://katadata.co.id/berita/nasional/61e779fd97802/kewirausahaan-pengertian-karakteristik-tujuan-tahapan-dan-modal>
- Leendertse, J., Schrijvers, M., & Stam, E. (2022). Measure Twice, Cut Once: Entrepreneurial Ecosystem Metrics. *Research Policy*, 51(9). <https://doi.org/10.1016/j.respol.2021.104336>
- Maltz, A. C., Shenhar, A. J., & Reilly, R. R. (2003). Beyond the balanced scorecard: Refining the search for organizational success measures. *Long Range Planning*, 36(2). [https://doi.org/10.1016/S0024-6301\(02\)00165-6](https://doi.org/10.1016/S0024-6301(02)00165-6)
- Patricia, M., & Piñango, E. R. (2011). Governance structures and entrepreneurial performance in family firms: An exploratory study of Latin American family firms. In *Understanding Entrepreneurial Family Businesses in Uncertain Environments: Opportunities and Resources in Latin America*.
- Prieger, J. E., Bampoky, C., Blanco, L. R., & Liu, A. (2016). Economic Growth and the Optimal Level of Entrepreneurship. *World Development*, 82. <https://doi.org/10.1016/j.worlddev.2016.01.013>
- Ratten, V. (2020). Entrepreneurship as Empowerment: Knowledge Spillovers and Entrepreneurial Ecosystems. In *Entrepreneurship as Empowerment: Knowledge spillovers and entrepreneurial ecosystems*. <https://doi.org/10.1108/978-1-83982-550-720201002>
- Rukmana, A. Y., Priyana, Y., Rahayu, M., & Jaelani, E. (2023). Dampak Kebijakan Pemerintah Terhadap Ekosistem Kewirausahaan : Studi Kasus Inkubator Bisnis di Indonesia. *Jurnal Ekonomi Dan Kewirausahaan West Science*, 1(03). <https://doi.org/10.58812/jekws.v1i03.527>
- Sekretaris Kabinet. (2024, March 7). *Buka BRI Microfinance Outlook 2024, Presiden Tekankan Pentingnya Sektor UMKM*. Sekretaris Kabinet.
- Setiadi, N. J. (2019). Perilaku konsumen: konsep dan implementasi untuk strategi dan penelitian pemasaran. *Jakarta: Kencana*.
- Shania, W., & Dewobroto, W. (2022). *The Driving Force of Micro Small and Medium Enterprise (MSME) Transition to Digital Marketing as a Solution to Increase Sales during the Covid-19 Pandemic*. <https://doi.org/10.4108/eai.27-7-2021.2316855>
- Spigel, B. (2020). Entrepreneurial Ecosystems: Theory, Practice and Futures. In

Entrepreneurial Ecosystems: Theory, Practice and Futures.
<https://doi.org/10.4337/9781788975933>

Stam, E. (2015). Entrepreneurial Ecosystems and Regional Policy. *European Planning Studies*, 23(9). <https://doi.org/10.1080/09654313.2015.1061484>

Stam, E., & van de Ven, A. (2021). Entrepreneurial ecosystem elements. *Small Business Economics*, 56(2). <https://doi.org/10.1007/s11187-019-00270-6>

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