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# CONCEPTUAL MODEL OF ENTREPRENEURIAL ECOSYSTEMS: A STUDY OF MALAYSIAN SMES ENTREPRENEURS

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#### **Abstract:**

The entrepreneurship ecosystem is a collaborative network that involves dynamic interaction systems and subsystems that support and sustain entrepreneurial activity within a specific region or environment. It is important to understand the roles of ecosystems influencing entrepreneurial activity. Therefore, the purpose of this study is to identify the entrepreneurship ecosystems among Malaysian Small and Medium Enterprises (SMEs) and proposing a conceptual model. This study employed self-administered questionnaire distributed to Malaysian SMEs entrepreneurs to gain a general perception of entrepreneurship ecosystem. The finding indicates three (3) elements of ecosystem significantly influencing entrepreneurial activity that includes training and education, culture and human capital. As such it is reflected the importance to reinforce the role of entrepreneurial ecosystems as supporting elements of entrepreneurship activity. However, two (2) elements namely as funding and government support are non-significant. The findings provided a valuable input for researchers, practitioners, higher education of institution and related governments agencies to develop plan of action or identify suitable program for entrepreneurship development.

## **Keywords:**

Entrepreneurship Ecosystem, SMEs, Malaysia, Training and Education, Culture, Human Capital, Quantitative Analysis.

#### Introduction

Malaysia government highly committed in developing entrepreneurs by providing programs and funding for business success. The 12<sup>th</sup> Malaysia Plan (2021 – 2025) provides a strong foundation for entrepreneurs to be a significant contributor in developing a prosperous,

inclusive and sustainable country through conducive entrepreneurial ecosystems. As such, understanding entrepreneurial ecosystems is essential for entrepreneurship scholars and policymakers (Cao and Shi, 2021).

Majority scholars agreed that entrepreneur is a person who owns, operates and manages a business that he or she have started (Barot, 2015; Hessels, 2019)). They continuously seeking for an opportunity and taking calculated risk as well as wealth creation (Chen et al, 2018). The entrepreneurial ecosystems on the other hand, consists of elements that supports and facilitates entrepreneurship activities (Cao and Shi,2021; Audretsch et al., 2024; Crişan et al., 2021). Historically, the fundamental ideas of entrepreneurial ecosystems developed by scholars in the 1980s and 1990s. Later, the understanding and knowledge of entrepreneurial ecosystems has been enriched through incorporated of essential elements such as social interaction, cultural and economic forces (Nijkamp 2003; Steyaert and Katz 2004).

Although the knowledge and understanding of entrepreneurial ecosystems is still loosed and no concrete agreement among scholars (Zahra and Nambisan, 2012; Kshetri, 2014; Mason and Brown, 2014; Stam, 2015), however, there are quite a number of empirical studies indicates the richness of entrepreneurial ecosystems that enables entrepreneurship disciplines and value creation successfully developed (Fritsch 2013; Tsvetkova 2015; Autio et al. 2014). For instance, Mack and Mayer (2016) finding of his study on entrepreneurial successes in Phoenix, Arizona, has contributed to a strong entrepreneurial ecosystems. Similarly, Spigel's (2017) explore entrepreneurial ecosystems in Waterloo and Calgary, Canada, suggested that entrepreneurial ecosystems able to create a cohesive social and economic system that supports the creation and growth of new ventures.

In this paper, the authors explore the need for the development of a comprehensive entrepreneurship ecosystems model for Malaysian SMEs entrepreneurs. A model of entrepreneurship ecosystems will be proposed as a guideline for entrepreneurial planning and activities. The increased clarity of how Malaysian entrepreneurship ecosystems work will enable better business and policy decision-making, thus will lead to the growth and development of business success.

Therefore, this study explores the role of ecosystems in entrepreneurship development. The proposed model uses from the main findings of extensive literature review and data collection from SMEs entrepreneurs based on their knowledge and experiences that occur in a Malaysian entrepreneurial ecosystem. This model provides a significant groundwork for future research in this area and propel Malaysian entrepreneurship development in the future.

# Literature Review

# Entrepreneurial Ecosystems Definition

Entrepreneurial ecosystems definition is still debated among researchers or practitioners. The debates conducted at various platform and forum especially with regards to the element that are influencing entrepreneurial ecosystems itself. In fact, the previous studies on entrepreneurship by Schmitz et al. (2017), Mary George et al. (2016) and Liñán and Fayolle (2015) have not focused on entrepreneurial ecosystems per se. The study should be advantage to both academician and researchers as a motivation to review and define from ecosystems perspectives.

Entrepreneurship gurus such as Schumpeter (1934) and Koontz and Fulmer (1984) defines entrepreneurial as a process of creating new goods and services for customer needs and want through explored, evaluated and exploited of unexploited market. This argument was supported by Shane and Venkataraman (2000) from their study of entrepreneurship ecosystems. Spigel (2017) look at different perspectives by defining entrepreneurial ecosystems involving human, institutions, and resources that are collectively support and influence entrepreneurship processes. However, according to Allan O'Connor et. al (2021) the entrepreneurial ecosystems normally focus on economic, physical environment, knowledge and technology.

# Entrepreneurial Ecosystems Model

Entrepreneurial ecosystems model are frameworks that indicates the key elements, relationships support the creation, growth, and sustainability of entrepreneurship activities. Isenberg model (2010) introduced six elements of an entrepreneurship ecosystems which consists of human capital, policy, finance, culture, government support, and markets. World Economic Forum (2013) formulated model includes of eight pillars for a successful entrepreneurial ecosystems. These pillars focus on human capital, finance, services, the entrepreneurs, government support, informal institutions and finally, customers in domestic and foreign markets. Mason and Brown (2014) proposed more generic elements incorporated entrepreneurial actors, entrepreneurial organizations, institutions and processes.

Woolley (2017) discusses on how scholars have elaborated and expanded on elements of entrepreneurial ecosystems in their models. His argument focusing on infrastructure for entrepreneurship such as resource endowments, institutional arrangements and proprietary function. Stam (2018) introduced framework and systemic conditions with the output of value creation and entrepreneurial activity. Feld (2020) emphasized the interaction between the elements in the ecosystems and access to relevant resources with government support.

Based on the extensive literature review, this research will focus on the five important elements of entrepreneurial ecosystems, that are human capital, culture, funding, training and education and government support. Table 1 indicates common elements of entrepreneurial ecosystems from the previous researches.

Table 1: Elements of Entrepreneurial Ecosystems from the Previous Researches

| Author's        | Year | Elements  |  |  |  |  |
|-----------------|------|---|--|--|--|--|
| Isenberg        | 2010 | Human Capital, Policy, Financial, Culture,            |  |  |  |  |
|                 |      | Government Support and Markets                        |  |  |  |  |
| World Economic  | 2013 | Human Capital, Finance, Services, Entrepreneurs,      |  |  |  |  |
| Forum           |      | Government Support, Informal Institutions and         |  |  |  |  |
|                 |      | Customers in Domestic and Foreign Markets             |  |  |  |  |
| Mason and Brown | 2014 | Leadership, Financial and Information and Culture     |  |  |  |  |
| Spigel          | 2017 | Policy, Infrastructure, Government Support, Financial |  |  |  |  |
|                 |      | and Networking  |  |  |  |  |
| Stam            | 2018 | Formal Institutions, Networks, Infrastructure,        |  |  |  |  |
|                 |      | Knowledge, Leadership and Financial                   |  |  |  |  |
| Feld            | 2020 | Culture, Economy, Knowledge and Financial             |  |  |  |  |

# Human Capital

The roles of human capital are globally known as a key factor for the success, growth and survival of business operations. According to Shane and Venkataraman (2013) human capital normally associated with knowledge, skills, competencies and experiences of a person who acquire through training and education as well as on the job training. The companies should provide opportunity for them to upskill and enhance their knowledge and experiences.

In the case of entrepreneurship, it acts as resources and capability that are able to contribute to the business performance (Taleb et. al. 2023). Failure in managing human capital will affect the business performance in the future. Therefore, the entrepreneurs should possess a strong human capital knowledge in mobilizing resources effectively to achieve company vision and mission (Kreiger et. al, 2024).

# Culture

Culture refers to values, beliefs, norms, behaviors and symbols that are acceptable by a group of people especially in the organizations (O'Reilly, Chatman & Caldwell, 1991). Muijen and Koopman (1994) suggested that culture is a process of building collective identity and establishing as sense of commitment to organization as a whole. According to Trice and Beyer (1993) culture also can be seen as a collection of assumptions that are accepted and expressed as specified guiding principles by a group of people in organization leading to people's attitude and actions.

Similarly, culture in entrepreneurship consists of the same components and plays a powerful role in shaping entrepreneurial activities (Kara and Dheer, 2023). Culture matters in entrepreneurship because it's able to shape entrepreneurial mindset and behavior and drive for innovation among staff (Singh, 2024; Abdelwahed, 2023).

## **Funding**

Business activity needs money or funding to start a new business or continue an existing one (Zarouk et. al, 2020; Tran et. al,2024). Funding is important to acquire raw material, pay for employee's salary, marketing purposes and others related business activities. Therefore, it is essential for entrepreneurs to have a proper knowledge and understanding of financial management for business purposes (Li and Qian, 2019). Sources of funding includes entrepreneurs' own equity, friends and family contribution, government grant, loan from commercial bank, business angels and venture capital. Entrepreneurs need to search and screen the loan or grant availability in the market and select the best and suitable sources of funding to finance their business.

# Training and Education

Training and education for entrepreneurs are essential for equipping themselves with the knowledge, skills, and entrepreneurial mindset that needed to start, manage, and grow a successful business (Zahrani, 2022). Entrepreneurs are able to enrich their knowledge and skills through formal and informal training and education. Formal education refers to structured, curriculum-based learning offered by accredited institutions like universities, colleges, polytechnics, or vocational schools (Brigola et. al, 2019; Souto-Otero, 2021)). Meanwhile, informal education refers to learning that occurs outside formal academic settings such as real-life experiences, self-directed learning, mentorship, and social interactions (Blyznyuk, 2022). Entrepreneurs should take this opportunity to attend any related classes or programs to enhance

their knowledge and skills. If the time very crucial and limited, they still can make themselves available through online courses.

# **Government Support**

Government support plays an important role in entrepreneurial development (Al-Omar, 2024; Eggers, 2020). Government support to entrepreneurial development inclusive all types of assistance provided by the public sector for business growth, innovation, and economic development (Aslam, 2023). This includes financial assistance, capacity building, regulatory facilitation, infrastructure, and market access.

Malaysia Government allocated significant amount of money in yearly budget special to Small and Medium Enterprises for their growth and development. This portrays the responsibility of the government in helping SMEs for their survival and competitiveness.

# **Research Objectives**

The research objectives of the study are as the following:

- a) To identify the elements of entrepreneurial ecosystems that have an impact on entrepreneurship activities.
- b) To determine the most influencing element of entrepreneurial ecosystems to the entrepreneurial activities
- c) To establish a conceptual model of entrepreneurial ecosystems for SME businesses

# **Research Questions**

To examine the entrepreneurial ecosystems, three critical research questions were crafted

- a) What are the elements of entrepreneurial ecosystems having an impact on entrepreneurship activities?
- b) What is the most influencing element of entrepreneurial ecosystems to the entrepreneurial activities?
- c) What is the suitable conceptual model of entrepreneurial ecosystems for SME businesses?

The research question was crafted with the aim to identified elements of entrepreneurial ecosystems that influencing entrepreneurial activities. Furthermore, the following research question were highlight to focus on the main contributing element. As such, it is the need to develop a conceptual model of entrepreneurial ecosystems as a guideline to propel entrepreneurship activities in the future.

# Research Methodology

## Data Collection Method

The study employed survey method and data collection was conducted based on questionnaire adopted from the previous studies. Questionnaires were sent through postage and email addressed to the selected entrepreneurs listed in the SME Business Directory. The return envelope provided to facilitate the data collection process. The questionnaire was targeted to

be answered by the owner manager or any personnel at managerial level of the company. This is due to the fact that owner manager or managerial level is able to provide valid and reliable answer.

# Sampling Technique and Sample Selection

A probability sampling technique was used in this study which allowed the researcher to draw valid inferences regarding the population (Ratten, 2023; Bell et. al., 2022). For the questionnaire, the list of potential respondents was obtained from SME Business Directory (SME Corp, 2022). The respondents for this research were selected from the list provided through simple random sampling. The questionnaires then distributed to all selected companies in the list provided through email and postage. This method was very challenging and costly because the researcher has to make a frequent follow-up through a phone call, WhatsApp's and texting a message to ensure they completed and submitted the questionnaire according to the time given. It took about 7 months from the date of distribution for data collection to be completed. The total number of respondents obtained was 405 Malaysian SMEs out of 1260 posted and email. However, after a thoroughly screening all responded questionnaire, only 387 are useful in which contributing 30.7% of response rate.

# Questionnaire Design

The questionnaire designed consists of two parts, whereby the first part focus on the elements of entrepreneurial ecosystems, human capital, culture, funding, training and education and government support. The second part consists of the background of respondents (demographic). Five-point Likert scale was used to measure the entrepreneurial elements with strongly disagree (1) to strongly agree (5).

# Reliability and Validity of Data

The results of reliability test of questionnaire tabulated in Table 2. The Cronbach's alpha value ranged from 0.8543 to 0.9853 and within the acceptable level thus the questionnaire was considered reliable. Meanwhile, Table 3 indicates the results of validity test (criterion) for the questionnaire used in this research. Validity is important to measures what it actually wishes to measure. Three major forms of validity are normally used: content, construct and criterion validity (Lyon, et. al. 2015; Patten, 2013). For validation purposes, the questionnaire in this research used content and criterion validity.

Table 2: Internal Consistency Analysis (Cronbach's Alpha)

| Sections | Factors                   | No. of items | Alpha value |  |
|----------|---------------------------|--------------|-------------|--|
| A        | Entrepreneurial Ecosystem | 10           | 0.8543      |  |
| В        | Human Capital             | 15           | 0.8783      |  |
| С        | Culture                   | 20           | 0.8645      |  |
| D        | Funding                   | 22           | 0.9543      |  |
| E        | Training and Education    | 18           | 0.9853      |  |
| F        | Government Support        | 17           | 0.8547      |  |
|          |                           |              |             |  |

 Table 3: Correlation Between the Constructs (Criterion Validity)

|                 | Entrepreneurial | Human   | Culture | Finance | Training  | Government |
|-----------------|-----------------|---------|---------|---------|-----------|------------|
| Constructs      | Ecosystem       | Capital |         |         | and       | Support    |
|                 |                 |         |         |         | Education |            |
| Entrepreneurial | 1.00            |         |         |         |           |            |
| Ecosystems      |                 |         |         |         |           |            |
| Human Capital   | 0.578**         | 1.00    |         |         |           |            |
| Culture         | 0.437**         | 0.413*  | 1.00    |         |           |            |
| Funding         | 0.235           | 0.237   | 0.312   | 1.00    |           |            |
| Training and    | 0.652***        | 0.425** | 0.432   | 0.247   | 1.00      |            |
| Education       |                 |         |         |         |           |            |
| Government      | 0.347           | 0.323   | 0.413   | 0.215   | 0.415*    | 1.00       |
| Support         |                 |         |         |         |           |            |
|                 |                 |         |         |         |           |            |

## **Results and Discussion**

# Background of respondents

The total response rate was 30.7% (387 responses out of 1,260 questionnaires distributed) as indicated in Table 4. Majority of the respondents (65.2%) were the management level of the responses companies which consists of Owner Manager, Directors, and Managers (Table 5). This indicates that information was gathered from key personnel of the company.

**Table 4: Analysis of Response Rate** 

| Total number of questionnaires issued | Total number responded | Total number of usable responses | Total usable response rate |  |
|---------------------------------------|------------------------|----------------------------------|----------------------------|--|
| 1,260                                 | 405                    | 387                              | 30.7%                      |  |
|                                       |                        |                                  |                            |  |

**Table 5: Number of Respondents Based on Position** 

| Position                         | No of Responses | Percentage |  |  |  |
|----------------------------------|-----------------|------------|--|--|--|
| Owner Manager                    | 43              | 11.1%      |  |  |  |
| Directors                        | 76              | 19.6%      |  |  |  |
| Managers                         | 135             | 34.9%      |  |  |  |
| Others                           | 133             | 34.4%      |  |  |  |
| <b>Total Number of Responses</b> | 387             | 100%       |  |  |  |

In the case of respondent's distributions, most of them (37.7%) were from Klang Valley (Centre of the Malaysia). This is because most of SME businesses located in the middle part of Malaysia due to strategic location. Then, it followed by Southern and East Coast region with 27.1% and 20.4% respectively (Table 6). Northern region, however, contributed only 14.7% of the responses. From the respondent's data distribution, it's indicating that the sample was considered representative of the general population of SMEs in Malaysia.

**Table 6: Distributions of Respondents** 

| Region                           | No of Responses | Percentage |  |  |
|----------------------------------|-----------------|------------|--|--|
| Klang Valley                     | 146             | 37.7%      |  |  |
| Southern                         | 105             | 27.1%      |  |  |
| East Coast                       | 79              | 20.4%      |  |  |
| Northern                         | 57              | 14.7%      |  |  |
| <b>Total Number of Responses</b> | 387             | 100%       |  |  |

The analysis furthermore, was carried out using the Pearson correlation to explore the relationship between entrepreneurial ecosystems and elements that have been identified in the literatures. The correlation analysis was the most suitable means of analysis for the research due to the number of responses (Pallant, 2018).

## **Factors Influencing Entrepreneurial Ecosystem**

In this research, elements influencing toward entrepreneurial ecosystems was identified through the analysis using standardized multiple regressions as summarized in Table 7. All identified factors were analyzed further to address the research questions as well as highlighted the most influencing element. R square provided the value of 0.659 which means that the success factors explain 65.9 percent of the variance in entrepreneurial ecosystems. As such the analysis provide good support of this study.

**Table 7: Coefficient Correlations** 

| Factors                | Unstandardized<br>Coefficient |                   | Standardized<br>Coefficient | t    | Sig.   | Collinearity<br>Diagnostic |       |
|------------------------|-------------------------------|-------------------|-----------------------------|------|--------|----------------------------|-------|
|                        | В                             | Standard<br>Error | Beta                        |      |        | Tolerance                  | VIF   |
| Human                  | 0.574                         | 0.124             | 0.425                       | 8.45 | 0.000* | 0.613                      | 2.357 |
| Capital                |                               |                   |                             |      |        |                            |       |
| Culture                | 0.745                         | 0.312             | 0.467                       | 5.32 | 0.000* | 0.426                      | 3.146 |
| Funding                | 0.323                         | 0.119             | 0.231                       | 7.43 | 0.342  | 0.514                      | 2.274 |
| Training and Education | 0.336                         | 0.231             | 0.535                       | 6.75 | 0.000* | 0.764                      | 2.864 |
| Government<br>Support  | 0.243                         | 0.317             | 0.312                       | 7.54 | 0.257  | 0.542                      | 3.772 |

<sup>\*</sup>p<0.05

The result of coefficient correlations for the constructs presented in Table 7. Its indicates that three of elements significantly influencing entrepreneurial ecosystems with human capital ( $\beta=0.425,\,p<0.05$ ); culture ( $\beta=0.467,\,p<0.05$ ) and training and education ( $\beta=0.535,\,p<0.05$ ). However, funding and government support are not influencing entrepreneurial ecosystems with  $\beta=0.231,\,p<0.05$  and  $\beta=0.312,\,p<0.05$  respectively. This finding is similar with the previous study of Clark et. al (2021); Donaldson (2021) and Østergaard and Marinova (2018). Further analysis indicates that the most influencing element to entrepreneurial ecosystems is training and education ( $\beta=0.535,\,p<0.05$ ), followed by culture ( $\beta=0.467,\,p<0.05$ ) and human capital ( $\beta=0.425,\,p<0.05$ ).

# **Conceptual Model of Entrepreneurial Ecosystem for SMEs**

Results obtained from the analysis concluded the common features and conceptual model was crafted by the researcher and presented in Figure 1. The conceptual model portrays that there are three success elements significantly influencing the entrepreneurial ecosystems which includes training and education, culture and human capital.

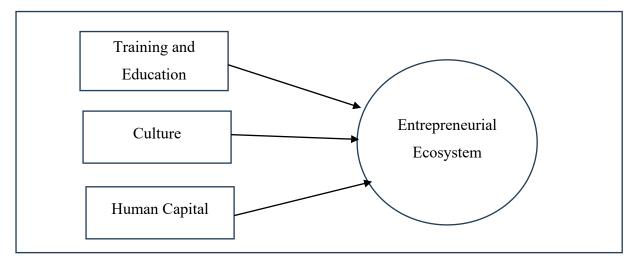


Figure 1: Conceptual Model of Entrepreneurial Ecosystems for SMEs

## **Conclusions and Recommendations**

The objectives of the study were to identify the elements that has an impact to entrepreneurial ecosystems of Malaysia SME businesses and investigates the most contributing element. The research employed quantitative sampling technique through self-administered questionnaire with a response rate more than 30% (387 respondents). From the analysis, results portray three of five elements under study significantly influencing entrepreneurial ecosystems. This includes training and education, culture and human capital. The other two elements; finance and government support are non-significant, thus not influencing entrepreneurial ecosystems. This is due to the facts that majority of the respondents used their own resources to start a business and less hope to government support. Further analysis shows the most influencing element for entrepreneurial ecosystems is training and education. Then followed by culture and human capital. From the finding, the study proposed a model of entrepreneurial ecosystems for SME businesses.

Training and education are essential for entrepreneurs to enhance their knowledge and skills to manage their business regardless at embryonic level or growth stage. Knowledge and skills will help the entrepreneur managing the business much better and more effective. Therefore, they need to allocate their valuable time and money to attend a related programs organized by public or private agencies. Moreover, they also able to strengthen their networking with other companies' owner through that channel. Without a proper and effective training and education, it will affect the business in the long run.

Entrepreneurs should portray a good business culture with the hope it will be a mirror to their subordinates. Strong leadership and communication skills should be possessed by entrepreneurs to ensure company culture able to be internalize among the staff. A good business culture is essential to build strong team work and this will lead to better business performance.

Human capital is important as means for business success and survival. Staff should be managed professionally and mobilize them strategically as they are valuable asset to the company. The entrepreneurs should treat them as part of the company and ensure that they will grow together. They need to enhanced their knowledge and skills to perform and achieve the target as expected by the management.

The finding useable for government agencies to design a policy related to entrepreneurship development. Model proposed is important for SME businesses to focus on significant elements for business success. Finally, for future research, it is suggested that a comparative study of Malaysian entrepreneurial ecosystems with other ASEAN countries.

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## References

- Abdelwahed, N. A. A. (2023). Nurturing the Entrepreneurial Path: Unraveling the Interplay between Entrepreneurial Mindset and Intention through the Lens of Entrepreneurial Culture. *Journal of Law and Sustainable Development*, 11(12).
- Aditya, R., & Fitria, S. (2024). The Influence of Culture, Education, and Entrepreneurial Innovation on Entrepreneurial Intention with Entrepreneurial Mindset as Intervening Variable on Management and Business Administration Student's Class of 2020. EKOMBIS REVIEW: Jurnal Ilmiah Ekonomi Dan Bisnis, 12(4).
- Al-Omar, S. et. al. (2024). The Impact of Entrepreneurship Education on Entrepreneurial Intention: The Moderating Role of Perceived Governmental Support. *Education* + *Training*, 66 (7): 777–800.
- Aslam, R. et. al. (2023). Investigating the Relationship between Government Support and SMEs' Sustainability through Financial and Green Lenses. *Journal of Business & Industrial Marketing*, 38 (11): 2379–2389.
- Audretsch D.B., Fiedler, A., Fath B. and Verreynne, M.L. (2024). The Dawn of Geographically Unbounded Entrepreneurial Ecosystems. *Journal of Business Venturing Insights*, 22.
- Autio, E., Kenney, M., Mustar, P., Siegel, D. & Wright, M. (2014). Entrepreneurial Innovation: The Importance of Context. *Research Policy*, 43 (7), 1097-1108.
- Barot, H. (2015). Entrepreneurship A Key to Success. *The international Journal of Business and Management*, 3 (1), 163-165.
- Bell, E., Bryman, A. & Harley, B. (2023). *Business Research Methods* (6<sup>th</sup>. Ed.). Oxford University Press, Oxford, United Kingdom.
- Blyznyuk, T. (2022). Trainings as a Kind of Informal Education and Their Efficiency for Educational Process: Experience and Prospects. *Mountain School of Ukrainian Carpaty*, (26), 5–11.
- Brigola, a.g. et. al. (2019). Limited Formal Education is Strongly Associated with Lower Cognitive Status, Functional Disability and Frailty Status in Older Adults. *Dement. Neuropsychol.* 13 (2).
- Brown, R. C., & Mason, C. (2014). Entrepreneurial Ecosystems and Growth-Oriented Entrepreneurship. *Organisation For Economic Cooperation & Development*.
- Cao, Z., Shi, X. A. (2021). Systematic Literature Review of Entrepreneurial Ecosystems in Advanced and Emerging Economies. *Small Business Economic*, 57, 75–110.

- Chen, F.W., Fu, L.W., Tsai, S.B., Su, C.H. (2018). The Influence of Entrepreneurship and Social Networks on Economic Growth-From a Sustainable Innovation Perspective. *Journal of Sustainability*, 10, 1-19.
- Clark D.N., Reboud S, Toutain O., Ballereau V., Mazzarol T. (2021). Entrepreneurial Education: An Entrepreneurial Ecosystem Approach. *Journal Of Management & Organization*. 27 (4), 694-714.
- Crișan, E.L., Salanță, I.I., Beleiu, I.N. (2021). A Systematic Literature Review on Accelerators. *Journal Of Technology Transfer*, 46, 62–89.
- Donaldson, C. (2021). Culture in the Entrepreneurial Ecosystem: A Conceptual Framing. *International Entrepreneurship Management Journal* 17, 289–319.
- Erik Stam & Andrew Ven (2021). Entrepreneurial Ecosystem Elements. *Small Business Economics*, Springer, 56(2), 809-832.
- Feld, B., & Hathaway, I. (2020). *The Startup Community Way: Evolving an Entrepreneurial Ecosystem*. John Wiley & Sons.
- George, M., Parida, N. & Lahti, V. T. (2016). A Systematic Literature Review of Entrepreneurial Opportunity Recognition: Insights on Influencing Factors. *International Entrepreneurship Management Journal*, 12, 309–350.
- Isenberg, D. J. (2010). How To Start an Entrepreneurial Revolution. *Harvard Business Review*. Hellström, M. Tsvetkova, A., Gustafsson, M. & Sjöblom, J. (2015). Replication Of Industrial Ecosystems: The Case of a Sustainable Biogas-For-Traffic Solution. *Journal of Cleaner Production*, 98, 123-132.
- Hessels, J., & Naudé, W. (2019). The Intersection of The Fields of Entrepreneurship and Development Economics: A Review Towards a New View. *Journal Of Economic Surveys*, 33 (2) 389-403.
- Inbev, A. B., Worldwide, A. P. C. O., Auto, B., Chance, C., DHL, D. P., Embraer, S. A., & Mutual, O. (2013). *World Economic Forum*.
- Kara, A., Dheer, R.J. (2023). The Relationship Between Culture and Entrepreneurship: The Role of Trust. *International Entrepreneurship Management Journal*, 19, 1803–1833.
- Koontz, H. & Fulmer, R.M. (1984). *A Practical Introduction to Business*. Mc Graw Hill, Irwin. Krieger, A., Stuetzer, M., Obschonka, M. (2022). The Growth of Entrepreneurial Human Capital: Origins and Development of Skill Variety. Small Business Economic 59, 645–664.
- Kshetri, N. (2014). Global Entrepreneurship Environment and Strategy. Routledge New York. Li, R. And Gian, Y. (2020). Entrepreneurial Participation and Performance: The Role of Financial Literacy. *Management Decision*, 58 (3), 583–599.
- Liñán, F., Fayolle, A. (2015). A Systematic Literature Review on Entrepreneurial Intentions: Citation, Thematic Analyses, And Research Agenda. *International Entrepreneurship Management Journal* 11, 907–933.
- Lyon, F., Mollering, G. And Saunders, M.N.K. (2015). *Handbook of Research Methods On Trust* (2<sup>nd</sup>. Edition), Edward Elger Publishing Limited, Cheltenham, United Kingdom.
- Mack, E., & Mayer, H. (2015). The Evolutionary Dynamics of Entrepreneurial Ecosystems. *Urban Studies*, *53*(10), 2118-2133.
- Mason, C. & Brown, R. (2013). Entrepreneurial Ecosystems and Growth-Oriented Entrepreneurship. *OECD LEED Programme*, The Hague, Netherlands.
- Michael F. (2013). New Business Formation and Regional Development: A Survey and Assessment of the Evidence, *Foundation and Trends in Entrepreneurship*, 9(3)
- O'Connor, A., Audretsch, D. (2023). Regional Entrepreneurial Ecosystems: Learning From Forest Ecosystems. *Small Business Economic*, 60, 1051–1079.

- O'Reilly, C.A., Chatman, J., Caldwell, D. (1991). People And Organizational Culture: A Profile Comparison Approach to Assessing Person-Organization Fit. *Academy Of Management Journal*, 34(3), 487-516.
- Østergaard, A. & Marinove, S.T. (2018). Human Capital in The Entrepreneurship Ecosystem. *International Journal of Entrepreneurship and Small Business*, 35(3) 371-390.
- Pallant, J. (2020). SPSS Survival Manual: A Step-by-Step Guide to Data Analysis Using IBM SPSS (7<sup>th</sup>. Ed.). Routledge, London.
- Patten, M. (2013). *Understanding Research Methods: An Overview of the Essentials (9<sup>th</sup>. Ed)*. Routledge, New York.
- Peter Nijkamp and Gabriella Vindigni. (2003). Impact Assessment of Qualitative Policy Scenarios: A Comparative Case Study on Land Use in Sicily. *Management of Environmental Quality: An International Journal*, 2003; 14 (1): 108–133.
- Ratten, V. (2023). *Heritage Entrepreneurship: Future Trends*. In: Ratten, V. (Eds) Heritage Entrepreneurship. Palgrave Studies in Global Entrepreneurship. Palgrave Macmillan, Singapore.
- Shane, S. And Venkataraman, S. (2013). The Promise of Entrepreneurship as a Field of Study. *Academy Of Management Review*, 25 (1).
- Singh, H. (2024). Cultivating Innovation for Success in The Digital Age. *International Council for Education Research and Training Entrepreneurial Mindset*, 3 (4), 183-193.
- Souto-Otero, M. (2021). Validation of Non-Formal and Informal Learning in Formal Education: Covert and Overt. *European Journal of Education*.
- Schmitz, A., Urbano, D., Dandolini, G.A. (2017). Innovation And Entrepreneurship in the Academic Setting: A Systematic Literature Review. *International Entrepreneurship Management Journal* 13, 369–395.
- Schumpeter, J.A. (1934), The Theory of Economic Development, Cambridge, Ma, Us: Harvard University Press.
- Shane, S. & Venkataraman, S. (2000). The Promise of Entrepreneurship As A Field Of Research. *Academic Of Management Review*, 25 (1).
- Small And Medium Enterprise Corporation Malaysia (2022). *Small And Medium Enterprise Business Directory*. Ministry Of Industrial Trade and Industry. Kuala Lumpur.
- Spigel, B & Stam, E (2018) *Entrepreneurial Ecosystems*. In R Blackburn, D De Clercq & J Heinonen (Eds), Sage Handbook of Entrepreneurship and Small Business., 21, Sage Publications, London.
- Spigel, B.B. (2017). Culture, and the Economic Geography of Practice: Entrepreneurial Mentorship in Ottawa and Waterloo, Canada, *Journal of Economic Geography*, 17 (2), 287–310.
- Stam, E. (2015). Entrepreneurial Ecosystems and Regional Policy: A Sympathetic Critique. *European Planning Studies*, 23(9), 1759–1769.
- Stam, E. And Van De Ven, A. (2021). Entrepreneurial Ecosystem Elements. *Small Business Economic*, 56, 809-832.
- Steyaert, C., & Katz, J. (2004). Reclaiming The Space of Entrepreneurship in Society: Geographical, Discursive and Social Dimensions. *Entrepreneurship And Regional Development*, 16(3), 179–196.
- Taleb S.T. Taleb, Norashidah Hashim, Norria Zakaria. (2023). Mediating Effect of Innovation Capability Between Entrepreneurial Resources and Micro Business Performance. The Bottom Line, 36 (1), 77–100.
- The 12<sup>th</sup> Malaysia Plan Report (2021 2025). Ministry of Finance, Kuala Lumpur.

- Tran, Q.N., Phung, T.M.T., Nguyen, N.H. (2024). Financial Knowledge Matters Entrepreneurial Decisions: A Survey in The Covid-19 Pandemic. *Journal Of Knowledge Economic*, 15, 2274–2297.
- Trice, H. M., & Beyer, J. M. (1993). The Cultures of Work Organizations. Prentice-Hall, Inc.
   Tsvetkova, A. (2015). Innovation, Entrepreneurship, and Metropolitan Economic Performance: Empirical Test of Recent Theoretical Propositions. Economic Development Quarterly, 29(4), 299-316.
- Van Muijen, J. J., & Koopman, P. L. (1994). The Influence of National Culture on Organizational Culture: A Comparative Study Between 10 Countries. *European Work and Organizational Psychologist*, 4(4), 367–380.
- Woolley, J. (2017). Infrastructure For Entrepreneurship. Oxford Research Encyclopedia of Business and Management.
- Zahra, S.A. & Nambisan, S. (2012). Entrepreneurship And Strategic Thinking in Business Ecosystems. Business Horizons. 55 (3). 219-229.
- Zahrani, A.A. (2022). Promoting Sustainable Entrepreneurship in Training and Education: The Role of Entrepreneurial Culture. *Environmental Economics and Management*, 10.
- Zarrouk, H., Sherif, M., Galloway, L., & El Ghak, T. (2020). Entrepreneurial Orientation, Access to Financial Resources and SMEs' Business Performance: The Case of the United Arab Emirates. *Journal Of Asian Finance, Economics and Business*, 7(12), 465-474.