Studies on Startup Success in Southeast Asia: a Bibliometrics Analysis with Scopus Dataset Between 2001-2020

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Abstract

The topic of startup success is receiving more and more attention from scholars, although there are still no comprehensive studies on this topic. This study contributes to this research gap by collecting the studies of scholars from the Southeast Asia (SEA) region from the Scopus dataset from 2001-2020. This study focuses on solving problems related to the topic: overall volume, growth pattern, geographical distribution, the most important source (journals or conferences), authors and research groups (through number of published documents and citations), documents (through number of citations and number of citations per year) and topics (through frequency of keywords. Excel and VOS viewer tools are used to process the data and extract the maps.

Research purpose:

Brief description of research purpose

The purpose of research is to examine the interest of Southeast Asian scholars on the topic of startup success. Startups are mentioned as organizations in the broader theme of entrepreneurship.

Research motivation:

Brief description of research motivation

The topic of success has been approached from different angles in the broader theme of entrepreneurship, such as entrepreneurial success, business success. However, there is a research gap on the success of startups as an organization.

Research design, approach and method:

Brief description of research design, approach and method.

This article used biometric analysis to examine trends in the literature regarding startup success among SEA scholars. The samples are selected from the Scopus database. VOS viewer tools are used to process the data and extract the maps.

Main findings:

Brief description of main findings.

The study focuses on four main aspects: (i) overall volume, growth pattern and geographic distribution of the extant publications on start-up success, (ii) Scientific collaboration network analysis, (iii) the most important outlets, research groups and publications on startup success, (iv) the most important research topics on startup success.

In addition, the study also highlights the lack of research on measuring startup success rating, written by SEA regional scholar.

Practical/managerial implications:

Brief description of practical/managerial implications

Research shows that despite growing interest from the academic community, the startup's successful knowledge base does not include academics and research teams who are actually productive and engaging in the topic. Research results suggest future research topics, with emphasis on measuring startup success rating.

Keywords: startup, success, bibliometrics, review, science mapping, startup success rating.

1. INTRODUCTION

Startups are important to the growth of any economy, including driving force for economic development (Fuerlinger, Fandl, & Funke, 2015; Schumpeter, 1934). Although, Startups are most vulnerable (Aernoudt, 2004) and facing with challenges and pitfalls (Wasserman, 2012). As a result, some startups succeed, fast-growing and exit the startup phase while many others fail or languish are small firms (Berger & Udell, 2006; Colombelli, Krafft, & Vivarelli, 2016; Katre & Salipante, 2012).

In the studies found, startups are mentioned as organizations in the broader theme of entrepreneurship. The global startup landscape shows that startups are not the same across geographies. In some places, as Silicon Valley, witnessing the birth of many successful startups and becoming unicorn startup, while in other, the resources and environment for startup development are limited. That implies there is an opportunity to research on SS in the context of a particular region, possibly SEA, to get a full picture of the region's startup success.

There have been several previous authors focusing on the topic of startup success. For instance, scholars tried to measurements of startup success (Ahmad & Hoffmann, 2008; Gorgievski, Ascalon, & Stephan, 2011), finding important critical factors of startup success (Abimbola & Agboola, 2011; Santisteban & Mauricio, 2017), or discovering characteristics of entrepreneur affect startup success (Fisher, Maritz, & Lobo, 2014; Wach, Stephan, Gorgievski, & Wegge, 2020). Furthermore, some research focuses on a single country as Singapore (Wang & Ang, 2004), Nigeria (Abimbola & Agboola, 2011), India (Satar & John, 2016) or the US (Lee & Lee, 2015). Some approaches of industry are also found, for example fresh juice distributors industry (Duchesneau & Gartner, 1990). Contributing to this collection, the study aims to examine the studies of Southeast Asian scholars on startup success by conducting bibliometric analysis with data obtained from Scopus database. Bibliometric analysis is widely used in order to create a comprehensive picture in a research topic such as education (Gümüş, Bellibaş, Gümüş, & Hallinger, 2020), health (Holman, Lynch, & Reeves, 2018), entrepreneurship (Chandra, 2018), tourism (Szpilko, 2017).

This research will specifically aim to answer the following questions:

RQ1: What is the overall volume, growth pattern, geographic distribution of publications on start-up success?

RQ2: How is the collaboration in research on startup success?

RQ2: What are the most important sources, authors, research groups and publications on startup success?

RQ4: What are the most important topics in the startup success literature?

2. RESEARCH METHOD

This review used biometric analysis to examine trends in the literature regarding startup success among SEA scholars published since the early 2000s. The bibliometric approach builds bibliometric networks based on knowledge downloaded from bibliographic databases (e.g Web of Science; Scopus) (Zupic & Čater, 2015). Different from traditional assessment methods, Biometric analysis examining bibliographic metadata seeks to integrate important findings within a research area. Bibliometric analysis technique review aims to understand the trends and systemic structure of the knowledge base in different disciplines (White & McCain, 1998).

2.1. Search Criteria and Identification of Sources

Many academics are often select Scopus for bibliometric review. First, Scopus has more coverage than Web of Science (Zhu & Liu, 2020). Secondly, it is referenced by a greater number of academics (Martín-Martín, Orduna-Malea, Thelwall, & Delgado López-Cózar, 2018). Finally, it provides more advanced capabilities than Google Scholar for exporting bibliographic data. Moreover, according to (Hallinger & Nguyen, 2020) Scopus was selected because the collection of documents for inclusion in its index uses a consistent standard.

To create the list of documents, a Scopus search was performed using the keyword "startup success", variations of the keyword "startup" are also used for search such as "start-up" and "start up". The search for documents was conducted in September, 2021. The search query was limited in journal articles and conference proceedings. This choice, there is also consensus of scholars, for example (Hallinger & Chatpinyakoop, 2019).

In this study, we also focused on the studies of scholars in SEA on the topic of Startup success. Therefore, the search was limited to publications published by scholars from the country of Southeast Asia. The query results in the Scopus database show that only 5 countries are found including Malaysia, Thailand, Indonesia, Singapore and Vietnam.

Eventually, the following keywords were used for the search query:

TITLE-ABS-KEY (success* AND ("start
up*" OR "start-
up*" OR startup*)) AND (EXCLUDE (PUBYEAR
, 2022) OR EXCLUDE (PUBYEAR , 2021)) AN
D (LIMIT-TO (SUBAREA , "BUSI") OR LIMIT-
TO (SUBAREA , "SOCI") OR LIMIT-
TO (SUBAREA , "ECON") OR LIMIT-
TO (SUBAREA , "DECI") OR LIMIT-
TO (SUBAREA , "ARTS") OR LIMIT-
TO (SUBAREA , "PSYC") OR LIMIT-
TO (SUBAREA , "MULT")) AND (LIMIT-
TO (DOCTYPE , "ar") OR LIMIT-
TO (DOCTYPE , "cp")) AND (LIMIT-
TO (LANGUAGE , "English")) AND (LIMIT-
TO (AFFILCOUNTRY , "Malaysia") OR LIMIT-
TO (AFFILCOUNTRY , "Thailand") OR LIMIT-
TO (AFFILCOUNTRY , "Indonesia") OR LIMIT-
TO (AFFILCOUNTRY , "Singapore") OR LIMIT-
TO (AFFILCOUNTRY , "Viet Nam"))

In this study, the authors used the literature search guiding principles outlined Systematic Reviews and Meta-Analyses (PRISMA) (Moher, Liberati, Tetzlaff, & Altman, 2009). PRISMA will extensively scan all reports published on the subject to find the answers to a clearly defined research question, and to that end will use various inclusion and exclusion criteria to identify the reports to be included in the review, and then synthesize the findings. In the field of entrepreneurship, PRISMA was used by authors as (Kakouris & Georgiadis, 2016; Rey-Martí, Ribeiro-Soriano, & Palacios-Marqués, 2016; Vallaster, Kraus, Merigó Lindahl, & Nielsen, 2019) to make systematic assessments. The steps in process of quest and screening clear a as shown in Figure 1.

The initial Scopus search yielded 94 documents. Following (Gümüş et al., 2020)'s suggestion, two co-authors scanned the titles and abstracts of articles to identify their relevance with the research questions. This step was undertaken on September 2021. Comparison of the two co-authors to agreement on the inclusion/exclusion of articles. If certain publications receive mixed opinion between the two co-authors, the two co-authors will discuss together until the agreement is reached. Eventually, we obtained 74 publications for final analysis (see Figure 1).
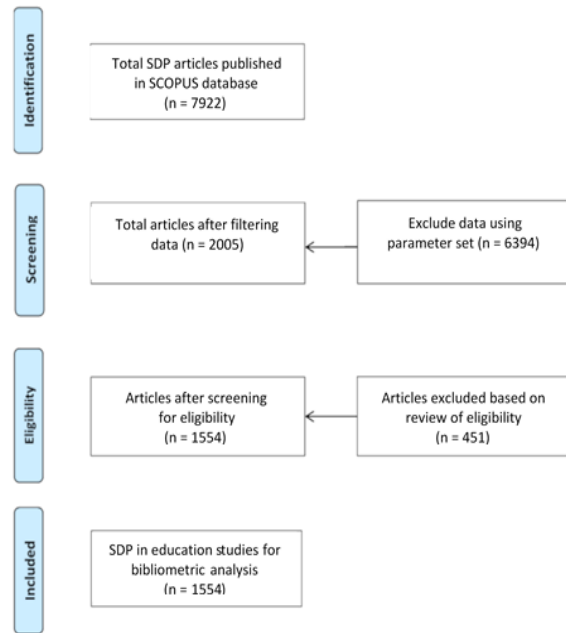

Figure 1. Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) flow diagram detailing steps in the identification and screening of sources for review of startups success from SEA

2.2. Data Analysis

Bibliographic data (authors, titles affiliations, citations, etc.) related to the 74 startup success documents from SEA authors were exported from Scopus into a master Excel file. Excel was used to chart the landscape of startup success. (e.g., growth trajectory, geographical distribution) and to describe statistics (e.g., types of research papers, number of authors from a country).

VOS viewer software supports the export of visual maps to illustrate citation analysis and co-citation analysis. Authors widely used VOS viewer software in published reviews of research fields such as social sciences (Levallois, Clithero, Wouters, Smidts, & Huettel, 2012; Leydesdorff, Park, & Wagner, 2014), business and management (Mingers & Leydesdorff, 2015), medicine (Sweileh, 2017) and education (Hallinger & Kovačević, 2019b, 2019a).

3. RESULT AND DISCUSSIONS

In this section, we represent the results of the bibliometric analysis of start-up success has been published by SEA authors, which correspond with our research questions

3.1. Total volume, growth pattern and geographical distribution of start-up success literature

Studies on start-up success are considered in three aspects: total volume, growth pattern and geographical locations. Review of 74 publications published between 2001 and the end of 2020 to clarify these things.

Figure 2. Growth pattern of start-up success literature

[for details, please see the appendix]

Pioneering studies using the term "startup success" are found in a sample of articles published in 2001 (Evans, 2001; Fock & Allampalli, 2001).

These publications consider factors for success such as: government resources or support (Fock & Allampalli, 2001); hidden or visible factors have led to the success of startups (Evans, 2001). These are the opening studies from SEA for inaugurating the expression in the field.

Looking at the number of publications each year in the period 2001-2020 (Figure 2) shows three distinct periods: 2001-2007; 2008-2015; and 2016-2020.

In the period 2001-2007, it seems that the success of entrepreneurship has not received significant attention from the SEA academic community, only 4 documents were found from Scopus database that is divided equally between 2001 and 2004. So, named an Inception phase.

In the period 2008-2015, 23 documents were published. The startup success attracted more attention from academics than the before stage. Publications are published every year (an average of 2.9 documents per year), but the absolute number of startup success documents is still limited (accounting for 31.1% of the total number of publications in the sample). Publications are published every year (an average of 2.9 documents per year), but the absolute number of startup success documents is still limited (accounting for 31.1% of the total number of publications in the sample). Thus, this period was named as Accruing period.

The period 2016-2020 witnessed a high growth period, 47 documents were found (accounting for 63.5% of all documents on Startup success in the sample). In particular, in 2019, the number of startup success documents were 14 publications (an average of 9.4 documents per year). Thus, this period was named as Stimulating period. Observation of the published literature leads to the conclusion that this is a rapidly emerging literature in the SEA region

The overall assessment of the growth trajectories of startup success studies since 2001 reflects the overall development of startup activity in the SEA region. It is apparently that start-up has only emerged in recent decades, especially over the past ten years as a global phenomenon. Therefore, the rapid increase in startup activity in the last 5 years of SEA region, as found in the sample studies, seems to be later than developed countries, other developed regions is also understandable.

3.2. Collaboration in research

Although the initial goal was to review startup success studies from the SEA region, after extracting data from Scopus, only 5 countries were found including: Malaysia, Singapore, Indonesia, Thailand, and Vietnam (Table 1). 74 articles in the sample affirming worldwide interest in startup success, also there is a noticeable geographical imbalance in this knowledge base. The distribution by countries based on contact/first author shows the following (Table 1).

Table 1. Geographical distribution of start-up success literature

Country	Number of documents
Malaysia	26
Thailand	18
Indonesia	15
Singapore	10
Viet Nam	5

The analysis of the sample showed that having 181 authors from 20 countries, however, only 14 documents were written by one author, the rest were all co-authored. Cooperation in research between the authors is shown in Figure 3.[for details, please see the appendix]

Figure 3. Co-authorship map of startup success scholars between 2001 and 2020 (display 181 authors; threshold three articles)

Specifically, figure 3 represents research groups on startup success over the time. Each circle in the figure represents an author. The circle size indicates the author's importance (the number of articles published by the author). The color of each circle represents the respective scholar's experience in startup success research: purple color indicates that the respective author had the first publication on startup success prior to 2010; yellow indicates that the respective author joined the studies of startup success in 2019 and 2020; green indicates that the respective author published the first document on startup success between 2010 and 2018. Different juxtaposing circles make up a research group.

The size of the circle reflects the number of publications on startup success of respective figure; meanwhile the color is the proxy of experience of respective figure in startup success study, the number of circles in each group shows the number of authors associated in group.

Figure 3 show that, some proofs have involved many authors in some group, but this cooperation is mainly about publishing a single document, such as the article "Critical success and moderating factors effect in Indonesian Public Universities' business incubators" published in 2018 with the participation of 10 authors (Gozali et al., 2018).

Another fact is that, if the collaborative group has published more than 1 document, it seems to work together only for a certain period of time (the circles in the group are the same color). Except for 2 groups, they have published at different times: (1) Usman M.'s team published articles on startup success topics in 2017 (M. Usman & Vanhaverbeke, 2017) and 2019 (S. M. Usman, Bukhari, Usman, Badulescu, & Sial, 2019). (2) Especially kee d.m.h's team is the best collaboration in the sample with 4 papers published in the years 2017 to 2019. Kee d.m.h is the first author in a series of 4 documents using quantitative methods, conducted in Malaysia on factors that support/affect startup success: technology-related, market-related, finance-related, and soft-related supports received by start-ups in Malaysia from the government agencies (Hung Kee, Mohd Yusoff, & Khin, 2019); The influence of gender on startup success (Kee & Abdul Rahman, 2018); the influence of entrepreneurial orientation on the success of startups (Kee, Khin, Taib, & Rahman, 2017; Kee & Rahman, 2017). From another angle, Kee d.m.h is the author of many publications on the topic of startup success in the SEA region.

3.3. The most influencing Journal and documents on startup success

Analysis of the sample extracted from Scopus shows no convergence of published articles by publication source. The 74 startup success documents were comprised 82.4% journal articles and 17.6% conference papers. Table 2 presents the main journals regarding the number of documents available in the Scopus database, and therefore in the study sample. The top 9 most influencing outlets of startup success, published 18 documents (1/4 sample).

Table 2. Top 9 Source Published in Startup Success Literature in SEA region, 2001-2020

TT	Source	Number of documents
1	emerald emerging markets case studies	3
2	pertanika journal of social sciences and humanities	3
3	cssr 2010 - 2010 international conference on science and social research	2
4	international journal of entrepreneurship and innovation management	2
5	international journal of innovation and learning	2
6	international journal of scientific and technology research	
7	journal of entrepreneurship education	2
8	journal of family business management	2
9	technovation	2

Citation analysis is also used to evaluate the most influential documents in the field of startup success. Table 3 shows the 5 most influential documents (by number of citations), published by high-ranking journals (as accounted in Scimago). That reflects the research on startup success reaching the best standard.

Table 3: Top 5 publications in Startup Success in SEA region, 2001-2020

[for details, please see the appendix]

It is noteworthy that these 5 documents represent 6.76% of the total 74 documents of the sample but represent 61.9% of the total citations of the sample. This highlights that they are important influential documents on the topic of startup success in the SEA region. However, these results show the dispersion of the citations, showing a small group of authors whose works have the greatest impact in this emerging field

While the appearance of start-up success documents on startup-related and management/business in general journals is obvious, their appearance on technology-related or Management Information Systems-related journals reflects the nature of start-up as technology-based firms rather than regular medium and small firms.

3.4. Topical trends in the SS knowledge base

To explore the most important topics in start-up success literature in SEA region, a network of keywords co-occurrences was created using VOS viewer based on the dataset containing 74 studies associated with startup success. First, following (van Eck & Waltman, 2014; Zupic & Čater, 2015), co-keyword analysis was conducted to identify the key themes in start-up success literature. Figure 4 represents our co-keyword analysis; the map is generated using a keyword threshold that appears at least 3 times.

The keywords that appear most often with startup success are maybe suggests the main priorities of scholars (Zhang, Estoque, Xie, Murayama, & Ranagalage, 2019). Accordingly, the top keywords in the field of startup success in the SEA region include: Startup (22); entrepreneurship (9); entrepreneur (7); innovation, sme, startup success, women entrepreneur (6).

Figure 4. Main driver research in Startup success in SEA region-based Co-word analysis, 2001-2020

[for details, please see the appendix]

Similar to Figure 3, the size of each circles reflects the number of occurrences of the respective keyword in our studied documents, while the widths of the lines connecting different circles represent the number of co-occurrences of the respective keywords in the same startup success documents. Looking at the keywords in the network, including the size of the circles and their relevance (the distance between the circles) and the circles of the same color in the network can suggest a major research topic. By analyzing the main node circles, sufficient labels of the five main clusters could be allocated to each of them, as shown in Figure 4. Specifically, as was shown in Table 4.

Table 4: Topical trends research in the startup success (2001–2020) based on the 21 most common keywords appearing nine or more times.

Cluster	Number of key words
1	Startup; venture capital
2	entrepreneurial ability; entrepreneurship; entrepreneurship education; human capital; performance; sme; vietnam
3	Malaysia; startup success; structural equation model; success factors; technopreneur
4	Entrepreneur; family business; innovation; women entrepreneur
5	fuzzy ahp; resource-based view; university business incubator

In cluster 1, including only 2 keywords Startup and venture capital shows that startup activities are placed in the interest of venture capital of SEA scholars. In the first 2 articles found in the sample with the keyword venture capital, learn about the venture capital funding experience of Germany and France to apply to Thailand. The topic of venture capital for startup is not only the concern of the government (Kovshova & Nair, 2017; Wonglimpiyarat, 2009, 2011) but also the concern of the business (Widyasthana G.N.S., Wibisono & Purwanegara, M.S., Siallagan, M., Sukmawati, 2017). In an effort to make startups successful, venture capital is frequently mentioned. Raising venture capital is also a sign of a startup success (Spiegel et al., 2016).

In cluster 2 includes keywords directly related to startups as "entrepreneurial ability; entrepreneurship; entrepreneurship education", besides the keywords as "human capital; performance; sme" were also found. Especially in this cluster 2, the keyword is the country name "vietnam". The keywords show that the research

topic focuses on factors that imply the possibility of startup activity being implemented. The country keyword "vietnam" appearing in this cluster suggests that many Vietnamese scholars concern of this topic.

Cluster 3 is similar to cluster 2 when keyword" "Malaysia" appears, implies that the most important research topic of Malaysian scholars. The interest of Malaysian scholars is to learn about factors directly related to the success of startups, such as measuring the success of startups or factors affecting success. Especially in this cluster, the keyword "technopreneur" appears, meaning of technology-related businesses, another way of named startup founders.

Cluster 4 includes keywords related to traditional owners and entrepreneurs such as "Entrepreneur, women entrepreneur", firms as "family business", in addition to the "innovation" promoting factor. This is a topic related to promoting innovation activities in traditional business activities.

Finally, cluster 5 is isolated in the keyword network (Figure 4), consisting of 3 keywords "fuzzy ahp; resource-based views; university business incubator", and appeared in three documents focusing on the topic of improving incubator efficiency in universities, in which incubators provide the necessary resources and influence the success of incubatees.

4. CONCLUSIONS AND SUGGESTION FOR FURTHER RESEARCH

Despite growing interest from scholars in the Southeast Asian region, little is known about the overall picture of start-up success literature. To contribute to filling this gap in the literature, we used bibliometric analysis to examine the existing literature on startup success in SEA region using data from Scopus between 2001 and 2020. Our study identified 74 documents on startup success worldwide from Scopus database. Specifically, we focused on four main aspects: (i) overall volume, growth pattern and geographic distribution of the extant publications on start-up success, (ii) Scientific collaboration network analysis, (iii) the most important outlets, research groups and publications on startup success, (iv) the most important research topics on startup success.

One of the strengths of bibliometric analysis pertains to its capacity to explore the key authors, research groups of the studied topic. In this project, we revealed top scholars and their research groups as the main hubs of start-up success knowledge. As represented above, our study revealed that despite receiving increasing interests from the academic community, startup success's knowledge base is not comprised of truly productive and active scholars and research groups. Specifically, the most productive scholar only published fours start-up success documents.

The historical evolution of the topic of startup success, the analysis of co-citation networks enabled the identification of clusters, has shown that the topic points to an emerging behavior, corroborated by the

prevalence of topics of interest, including common interest of scholars from one country. This suggests an opportunity to increase research in this area in that country, as knowledge of the phenomenon is consolidating in academia.

This study has several limitations, as many others do (Vuong, 2020). Despite the advantages of bibliometric analysis, we should be aware that it only works with metadata information without the content of startup success studies. It is necessary to understand the content of the research, such as analysis of the thematic categories (Lima & Carlos Filho, 2019).

Finally, there have been studies examining the impact of factors on the success of startups, e.g. (Le Trinh, 2019). However, there is no research on measuring the success of startups as an organization. This research topic contributes to a more complete picture of startup success. In addition, this study uses samples extracted from the Scopus database, which may be limited when studies on this topic are conducted by SEA scholars in other databases.

REFERENCES

[1] Abimbola, O., & Agboola, M. (2011). Environmental Factors and Entrepreneurship Development in Nigeria. *Journal of Sustainable Development in Africa*, 13(4), 166–176.

[2] Aernoudt, R. (2004). Incubators: Tool for Entrepreneurship? *Small Business Economics*, 23(2), 127–135. Retrieved from https://doi.org/10.1023/B:SBEJ.0000027665.54173.23

[3] Ahmad, N., & Hoffmann, A. (2008). A Framework for Addressing and Measuring Entrepreneurship. *SSRN Electronic Journal*, (November). Retrieved from https://doi.org/10.2139/ssrn.1090374

[4] Berger, A. N., & Udell, G. F. (2006). A more complete conceptual framework for SME finance. *Journal of Banking & Finance*, 30(11), 2945–2966. Retrieved from https://doi.org/10.1016/j.jbankfin.2006.05.008

[5] Chandra, Y. (2018). Mapping the evolution of entrepreneurship as a field of research (1990–2013): A scientometric analysis. *PLOS ONE*, 13(1), e0190228. Retrieved from https://doi.org/10.1371/journal.pone.0190228

[6] Colombelli, A., Krafft, J., & Vivarelli, M. (2016). To be born is not enough: the key role of innovative start-ups. *Small Business Economics*, 47(2), 277–291. Retrieved from https://doi.org/10.1007/s11187-016-9716-y

[7] Duchesneau, D. A., & Gartner, W. B. (1990). A profile of new venture success and failure in an emerging industry. *Journal of Business Venturing*, 5(5), 297–312. Retrieved from https://doi.org/10.1016/0883-9026(90)90007-G

[8] Evans, C. (2001). An E-Strategy for Online E-Business. *Information Systems Management*, 18(4), 8–21. Retrieved from https://doi.org/10.1201/1078/43198.18.4.20010901/31461.2

[9] Fisher, R., Maritz, A., & Lobo, A. (2014). Evaluating entrepreneurs' perception of success: Development of a measurement scale. *International Journal of Entrepreneurial Behaviour and Research*, 20(5), 478–492. Retrieved from https://doi.org/10.1108/IJEBR-10-2013-0157

[10] Fock, S. T., & Allampalli, D. G. (2001). Enterprise 50: successful growing enterprises (SGEs) of Singapore: an exploratory study of success factors. *International Journal of Entrepreneurship and Innovation Management*, 1(3/4), 299. Retrieved from https://doi.org/10.1504/IJEIM.2001.000458

[11] Fuerlinger, G., Fandl, U., & Funke, T. (2015). The role of the state in the entrepreneurship ecosystem: insights from Germany. *Triple Helix*, 2(1), 3. Retrieved from https://doi.org/10.1186/s40604-014-0015-9

[12] Gorgievski, M. J., Ascalon, M. E., & Stephan, U. (2011). Small Business Owners' Success Criteria, a Values Approach to Personal Differences. *Journal of Small Business Management*, 49(2), 207–232. Retrieved from https://doi.org/10.1111/j.1540-627X.2011.00322.x

[13] Gozali, L., Masrom, M., Zagloel, T. Y. M., Haron, H. N., Dahlan, D., Daywin, F. J., … Susanto, E. H. (2018). Critical Success and Moderating Factors Effect in Indonesian Public Universities' Business Incubators. *International Journal of Technology*, 9(5), 1049. Retrieved from https://doi.org/10.14716/ijtech.v9i5.1363

[14] Gümüş, S., Bellibaş, M. Ş., Gümüş, E., & Hallinger, P. (2020). Science mapping research on educational leadership and management in Turkey: a bibliometric review of international publications. *School Leadership & Management*, 40(1), 23–44. Retrieved from https://doi.org/10.1080/13632434.2019.1578737

[15] Hallinger, P., & Chatpinyakoop, C. (2019). A Bibliometric Review of Research on Higher Education for Sustainable Development, 1998–2018. *Sustainability*, 11(8), 2401. Retrieved from https://doi.org/10.3390/su11082401

[16] Hallinger, P., & Kovačević, J. (2019a). A Bibliometric Review of Research on Educational Administration: Science Mapping the Literature, 1960 to 2018. *Review of Educational Research*, 89(3), 335–369. Retrieved from https://doi.org/10.3102/0034654319830380

[17] Hallinger, P., & Kovačević, J. (2019b). Science mapping the knowledge base in educational leadership and management: A longitudinal bibliometric analysis, 1960 to 2018. *Educational Management Administration and Leadership*, 174114321985900. Retrieved from https://doi.org/10.1177/1741143219859002

[18] Holman, D., Lynch, R., & Reeves, A. (2018). How do health behaviour interventions take account of social context? A literature trend and

co-citation analysis. *Health: An Interdisciplinary Journal for the Social Study of Health, Illness and Medicine*, 22(4), 389–410. Retrieved from https://doi.org/10.1177/1363459317695630

[19] Hung Kee, D. M., Mohd Yusoff, Y., & Khin, S. (2019). The Role of Support on Start-Up Success: A PLS-SEM Approach. *Asian Academy of Management Journal*, 24(Supp.1), 43–59. Retrieved from https://doi.org/10.21315/aamj2019.24.s1.4

[20] Kakouris, A., & Georgiadis, P. (2016). Analysing entrepreneurship education: a bibliometric survey pattern. *Journal of Global Entrepreneurship Research*, 6(1), 6. Retrieved from https://doi.org/10.1186/s40497-016-0046-y

[21] Katre, A., & Salipante, P. (2012). Start-Up Social Ventures: Blending Fine-Grained Behaviors From Two Institutions for Entrepreneurial Success. *Entrepreneurship Theory and Practice*, 36(5), 967–994. Retrieved from https://doi.org/10.1111/j.1540-6520.2012.00536.x

[22] Kee, D. M. H., & Abdul Rahman, N. (2018). Effects of entrepreneurial orientation on start-up success: A gender perspective. *Management Science Letters*, 699–706. Retrieved from https://doi.org/10.5267/j.msl.2018.4.012

[23] Kee, D. M. H., Khin, S., Taib, F. M., & Rahman, N. A. (2017). Using PLS-SEM to Assess the Effect of Entrepreneurial Orientation (EO) on Start-Up Success: The Moderating Role of Support Services. *Advanced Science Letters*, 23(8), 7817–7820. Retrieved from https://doi.org/10.1166/asl.2017.9584

[24] Kee, D. M. H., & Rahman, N. A. (2017). Analyzing entrepreneurial orientation impact on start-up success with support service as moderator: A PLS-SEM approach. *Business and Economic Horizons*, 13(2), 128–141. Retrieved from https://doi.org/10.15208/beh.2017.10

[25] Kovshova, L., & Nair, P. B. (2017). Crowdfunding in Russia: a thematic analysis of funder motives. *Global Business and Economics Review*, 19(3), 256. Retrieved from https://doi.org/10.1504/GBER.2017.083963

[26] Le Trinh, T. (2019). Factors Affecting Startup Performance of Small and Medium-sized Enterprises in Danang City. *Entrepreneurial Business and Economics Review*, 7(3), 187–203. Retrieved from https://doi.org/10.15678/EBER.2019.070310

[27] Levallois, C., Clithero, J. A., Wouters, P., Smidts, A., & Huettel, S. A. (2012). Translating upwards: linking the neural and social sciences via neuroeconomics. *Nature Reviews Neuroscience*, 13(11), 789–797. Retrieved from https://doi.org/10.1038/nrn3354

[28] Leydesdorff, L., Park, H. W., & Wagner, C. (2014). International coauthorship relations in the Social Sciences Citation Index: Is internationalization leading the Network? *Journal of the Association for Information Science and Technology*, 65(10), 2111–2126. Retrieved from https://doi.org/10.1002/asi.23102

[29] Lima, S., & Carlos Filho, F. de A. (2019). Bibliometric analysis of scientific production on sharing economy. *Revista de Gestão*, 26(3), 237–255. Retrieved from https://doi.org/10.1108/REGE-01-2019-0018

[30] Martín-Martín, A., Orduna-Malea, E., Thelwall, M., & Delgado López-Cózar, E. (2018). Google Scholar, Web of Science, and Scopus: A systematic comparison of citations in 252 subject categories. *Journal of Informetrics*, 12(4), 1160–1177. Retrieved from https://doi.org/10.1016/j.joi.2018.09.002

[31] Mingers, J., & Leydesdorff, L. (2015). Identifying research fields within business and management: a journal cross-citation analysis. *Journal of the Operational Research Society*, 66(8), 1370–1384. Retrieved from https://doi.org/10.1057/jors.2014.113

[32] Moher, D., Liberati, A., Tetzlaff, J., & Altman, D. G. (2009). Preferred Reporting Items for Systematic Reviews and Meta-Analyses: The PRISMA Statement. *PLoS Medicine*, 6(7), e1000097. Retrieved from https://doi.org/10.1371/journal.pmed.1000097

[33] Rey-Martí, A., Ribeiro-Soriano, D., & Palacios-Marqués, D. (2016). A bibliometric analysis of social entrepreneurship. *Journal of Business Research*, 69(5), 1651–1655. Retrieved from https://doi.org/10.1016/j.jbusres.2015.10.033

[34] Santisteban, J., & Mauricio, D. (2017). Systematic literature review of critical success factors of Information Technology startups. *Academy of Entrepreneurship Journal*, 23(2), 1–23. Retrieved from https://www.semanticscholar.org/paper/Key-Psychological-Factors-as-Predictors-of-Success%3A-Chatterjee-Das/3d5cafd0acadae7af712cfb12c61c8fdddbd866c

[35] Schumpeter, J. A. (1934). *The Theory of Economic Development*. Harvard University Press.

[36] Spiegel, O., Abbassi, P., Zylka, M. P., Schlagwein, D., Fischbach, K., & Schoder, D. (2016). Business model development, founders' social capital and the success of early stage internet start-ups: a mixed-method study. *Information Systems Journal*, 26(5), 421–449. Retrieved from https://doi.org/10.1111/isj.12073

[37] Sweileh, W. M. (2017). Bibliometric analysis of medicine – related publications on refugees, asylum-seekers, and internally displaced people: 2000 – 2015. *BMC International Health and Human Rights*, 17(1), 7. Retrieved from https://doi.org/10.1186/s12914-017-0116-4

[38] Szpilko, D. (2017). Tourism Supply Chain– Overview of Selected Literature. *Procedia Engineering*, 182, 687–693. Retrieved from https://doi.org/10.1016/j.proeng.2017.03.180

[39] Usman, M., & Vanhaverbeke, W. (2017). How start-ups successfully organize and manage open innovation with large companies. *European Journal of Innovation Management*, 20(1), 171–

186. Retrieved from https://doi.org/10.1108/EJIM-07-2016-0066

[40] Usman, S. M., Bukhari, F. A. S., Usman, M., Badulescu, D., & Sial, M. S. (2019). Does the Role of Media and Founder's Past Success Mitigate the Problem of Information Asymmetry? Evidence from a UK Crowdfunding Platform. *Sustainability*, 11(3), 692. Retrieved from https://doi.org/10.3390/su11030692

[41] Vallaster, C., Kraus, S., Merigó Lindahl, J. M., & Nielsen, A. (2019). Ethics and entrepreneurship: A bibliometric study and literature review. *Journal of Business Research*, 99, 226–237. Retrieved from https://doi.org/10.1016/j.jbusres.2019.02.050

[42] van Eck, N. J., & Waltman, L. (2014). Visualizing Bibliometric Networks. In *Measuring Scholarly Impact* (pp. 285–320). Cham: Springer International Publishing. Retrieved from https://doi.org/10.1007/978-3-319-10377-8_13

[43] Vuong, Q.-H. (2020). Reform retractions to make them more transparent. *Nature*, 582(7811), 149–149. Retrieved from https://doi.org/10.1038/d41586-020-01694-x

[44] Wach, D., Stephan, U., Gorgievski, M. J., & Wegge, J. (2020). *Entrepreneurs' achieved success: developing a multi-faceted measure*. *International Entrepreneurship and Management Journal* (Vol. 16). Retrieved from https://doi.org/10.1007/s11365-018-0532-5

[45] Wasserman, N. (2012). The founder's dilemmas: anticipating and avoiding the pitfalls that can sink a startup. *Choice Reviews Online*, 49(12), 49-6986-49–6986. Retrieved from https://doi.org/10.5860/CHOICE.49-6986

[46] White, H. D., & McCain, K. W. (1998). Visualizing a discipline: An author co-citation analysis of information science, 1972–1995. *Journal of the American Society for Information Science*, 49(4), 327–355. Retrieved from https://doi.org/10.1002/(SICI)1097-4571(19980401)49:4<327::AID-ASI4>3.0.CO;2-W

[47] Widyasthana G.N.S., Wibisono, D., & Purwanegara, M.S., Siallagan, M., Sukmawati, P. (2017). Corporate venture capital strategy for selecting start-up investments in Indonesia using an agent-based model: Cases of a mobile application start-up, payment solution start-up and digital advertising start-up. *Journal of Entrepreneurship Education*. Retrieved from https://www.semanticscholar.org/paper/CORPORATE-VENTURE-CAPITAL-STRATEGY-FOR-SELECTING-IN-Sandhy/b14899d49a0c844bdd7aa7b3934174c29200ff7c

[48] Wonglimpiyarat, J. (2009). Financing innovative businesses through venture capital. *International Journal of Entrepreneurship and Innovation Management*, 9(4), 380. Retrieved from https://doi.org/10.1504/IJEIM.2009.024586

[49] Wonglimpiyarat, J. (2011). The dynamics of financial innovation system. *The Journal of High Technology Management Research*, 22(1), 36–46. Retrieved from https://doi.org/10.1016/j.hitech.2011.03.003

[50] Zhang, X., Estoque, R. C., Xie, H., Murayama, Y., & Ranagalale, M. (2019). Bibliometric analysis of highly cited articles on ecosystem services. *PLOS ONE*, 14(2), e0210707. Retrieved from https://doi.org/10.1371/journal.pone.0210707

[51] Zhu, J., & Liu, W. (2020). A tale of two databases: the use of Web of Science and Scopus in academic papers. *Scientometrics*, 123(1), 321–335. Retrieved from https://doi.org/10.1007/s11192-020-03387-8

[52] Zupic, I., & Čater, T. (2015). Bibliometric Methods in Management and Organization. *Organizational Research Methods*, 18(3), 429–472. Retrieved from https://doi.org/10.1177/1094428114562629

APPENDIX

No	Title	Authors	Source (ranking)	Quartiles (2020)	Year	Total Citations (ranking)
1	Entrepreneurial interest of university students in Singapore	Wang C.K., Wong P.-K.	Technovation (1)	Q1	2004	205 (1)
2	On the Fintech Revolution: Interpreting the Forces of Innovation, Disruption, and Transformation in Financial Services	Gomber P., Kauffman R.J., Parker C., Weber B.W.	Journal of Management Information Systems (2)	Q1	2018	198 (2)
3	Internet-based ICT adoption among SMEs: Demographic versus benefits, barriers, and adoption intention	Tan K.S., Chong S.C., Lin B., Eze U.C.	Journal of Enterprise Information Management (3)	Q2	2010	100 (3)
4	The interplay of human and social capital in shaping entrepreneurial performance: The case of Vietnam	Santarelli E., Tran H.T.	Small Business Economics (4)	Q1	2013	82 (4)
5	A fuzzy AHP to prioritize enabling factors for strategic management of university business incubators: Resource-based view	Somsuk N., Laosirihongthong T.	Technological Forecasting and Social Change (5)	Q1	2014	80 (5)

Table 3: Top 5 publications in Startup Success in SEA region, 2001-2020
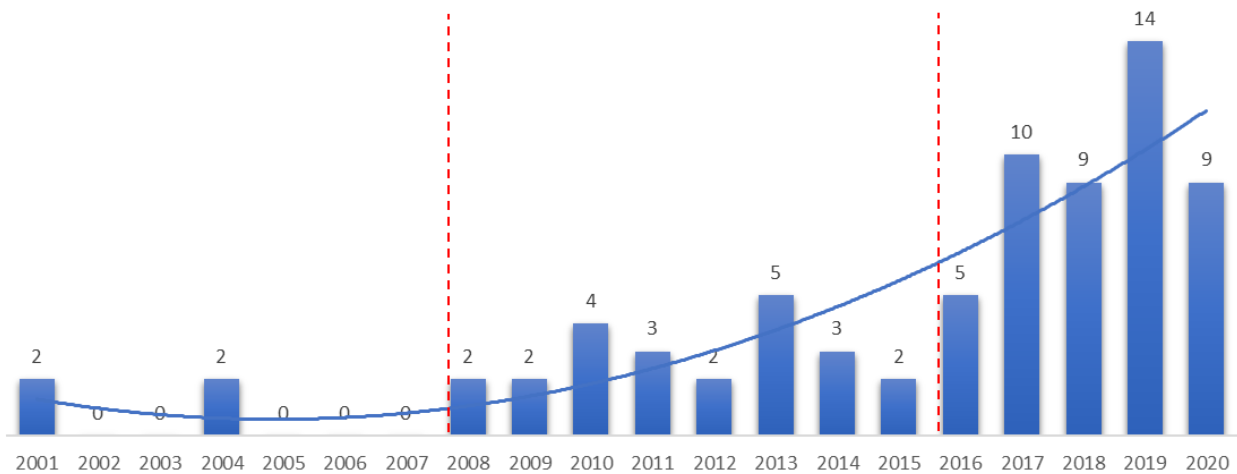

Figure 2. Growth pattern of start-up success literature
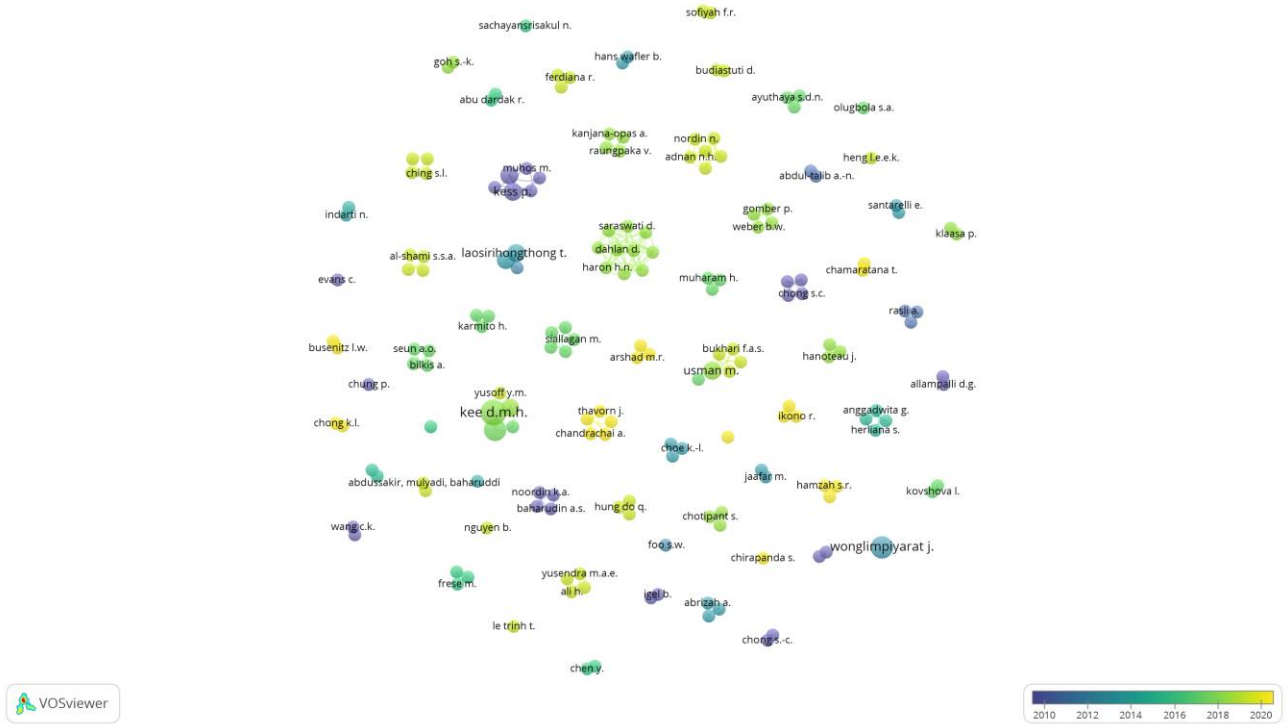
Figure 3. Co-authorship map of startup success scholars between 2001 and 2020 (display 181 authors; threshold three articles)
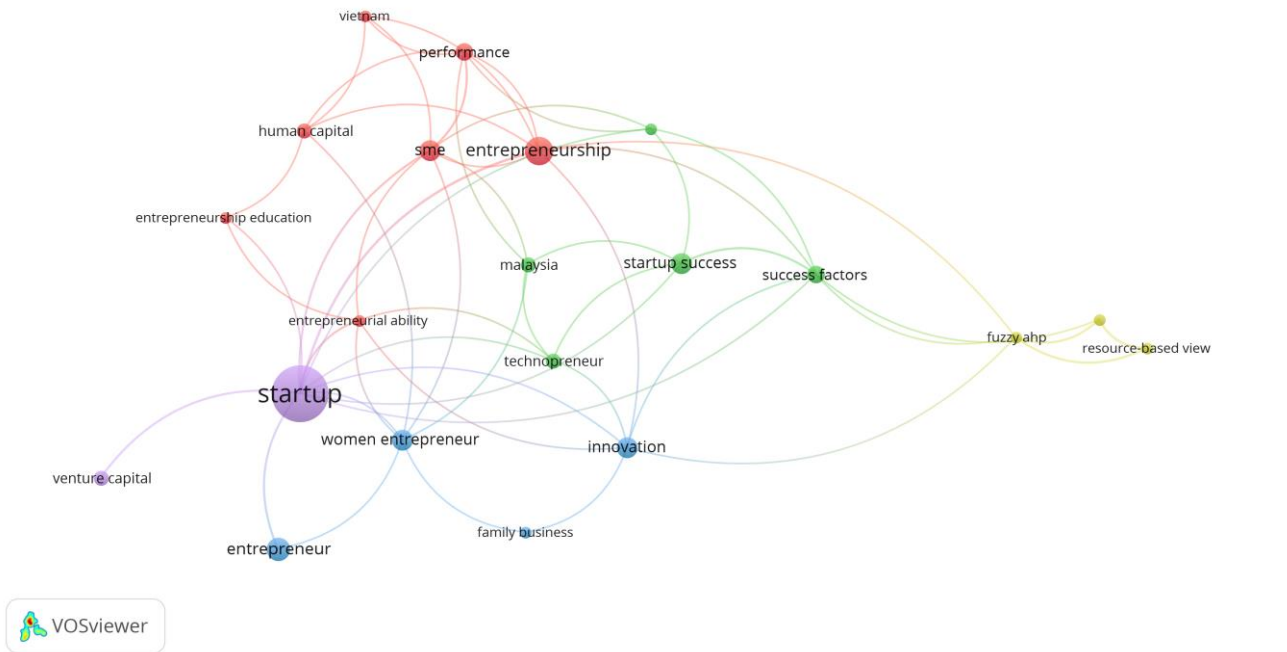

Figure 4. Main driver research in Startup success in SEA region-based Co-word analysis, 2001-2020