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Article

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Administrative Sciences

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Suggested Citation: Sevilla-Bernardo, Javier; Sánchez-Robles Rute, Blanca; Herrador-Alcaide, Teresa C. (2022) : Success factors of startups in research literature within the entrepreneurial ecosystem, Administrative Sciences, ISSN 2076-3387, MDPI, Basel, Vol. 12, Iss. 3, pp. 1-24, <https://doi.org/10.3390/admsci12030102>

This Version is available at:

<https://hdl.handle.net/10419/275372>

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Article

Success Factors of Startups in Research Literature within the Entrepreneurial Ecosystem

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Abstract: What are the most important factors for the success of a startup? This study aims to shed light on this issue through the statistical analysis of a bibliographical sample of 60 recent articles. Through a detailed study of the selected literature, but from the perspective of business experience, we have identified the comparative relevance of those factors that recent research has highlighted as the main drivers of start-up success. Our analysis allows us to define a core of seven practical business success factors supported by the academic literature (Core-7 SF). This core makes it possible to identify the intersection between success in business practice and academic research. Our Core-7 SF shows that the most important variable to predict the success of a start-up is the Idea, followed by the CEO's Leadership, the Business Model, the Marketing approach, and the Entrepreneurial Team. In addition, we found some differences between the geographic areas of affiliation of the authors, suggesting that cultural characteristics influence the weight given to the various reasons for success.

Keywords: entrepreneurship; start-up success; performance; development; startup survival rate



Citation: Sevilla-Bernardo, Javier, Blanca Sanchez-Robles, and Teresa C. Herrador-Alcaide. 2022. Success Factors of Startups in Research Literature within the Entrepreneurial Ecosystem. *Administrative Sciences* 12: 102. <https://doi.org/10.3390/admsci12030102>

Received: 15 June 2022

Accepted: 2 August 2022

Published: 12 August 2022

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1. Introduction

The challenge of any entrepreneur is to define and validate the business concept: the market opportunities (e.g., critical need, target market, market size and opportunity); the offer (i.e., the product or service and value proposition); the business model (i.e., monetization); and the marketing strategy needed for delivering the offer to the target customer, obtaining profit (Picken 2017). Entrepreneurs set up, launch, and manage business projects. Narrower definitions describe entrepreneurship as the process of planning, starting, and managing a new business, which is often small at the beginning, or as the ability and willingness to develop, organize and manage a business enterprise, along with all its risks necessary for a successful development (Eisenmann 2013). In this way, entrepreneurship and startups are linked to a form of progress through the formation of business identity beyond companies with a traditional corporate framework (Egan-Wyer et al. 2018).

A startup differs from other SMEs (small and medium-sized enterprise) in its high degree of innovation (with respect to technology, internal processes, or business models, among others), its capacity to penetrate global markets via Internet, and its access to novel sources of financing that allow it to grow faster than SMEs (Aulet and Murray 2013). Skawińska and Zalewski (2020) define the startup as a young, small, independent, creative, innovative company that performs research and development activities in order to solve real problems and propose future solutions, with an attractive business model and a talented team. Under this approach, we consider that a startup company may be defined as a business organization created by entrepreneurs within a collaborative structure.

At the beginning, many start-ups face the so-called “Death Valley” phase (Hudson and Khazragui 2013), which is the start-up phase in which companies must launch and adapt their product to the market and obtain regular income and profits to sustain themselves, often resulting in a low “success” or survival rate of start-ups (Hyytinen et al. 2015). However, when a startup lives beyond that stage, the start-up should see exponential growth in profits and size), in contrast to the more linear performance that typically characterizes the evolution of SMEs. In addition, it is precisely this characteristic of exponential growth that marks the success of start-ups. Growth (profit, cash flow, and employees) over time is an exponential function for start-ups versus a linear function for other companies Aulet (2013). However, why do some start-ups survive and achieve success while others fail? According to Rauch (2020) the identification of success factors for startups is addressed through mostly five types of reviews: meta-analysis, systematic literature review, bibliometric reviews, the synthesis of qualitative research and historiometric analysis. These analyses are based on the concept of “success”, understood both in terms of survival and in terms of growth.

Success is often associated with concepts such as growth, turnover, profit, return on investment, productivity (output per man and hour), and number of employees (Brandstätter 2011). Other common aspects of success are sales growth and company age (Steffens et al. 2009). In many cases the consideration of only quantitative or financial factors tells little about the company economic reality and cannot be considered a measure of firm success (Kiviluoto 2013). The complexity of company success needs to be approached through a more holistic view, considering the company as a complex and interconnected whole, which has led the academic literature to a broader analysis aimed at narrowing down the success factors. Some authors have found a coincidence of factors, such as the “idea” factor and the “team” factor, as characteristics associated with the success of start-ups (see Berkus 2016; Gross 2015); others refer to management skills (Díaz-Santamaría and Bulchand-Gidumal 2021) or success in entrepreneurship (Tasnim et al. 2014).

In this paper we take business practice as the starting point for the identification of success factors. It is well known that on many occasions business practice is ahead of academic theorizing developed through research and summarized in the academic literature. Berkus (2006) was one of the pioneers in identifying business success factors within the framework of entrepreneurial ecosystems. The Berkus Method offers aspiring entrepreneurs and investors a simple tool to evaluate a startup before generating revenue, focusing on risk factors rather than financial projections (Amis et al. 2001).

The Berkus method combines different aspects under the same entrepreneurial success assessment tool. The method employs a simple model to estimate companies’ earnings before they are earned. The Berkus Method was created and supported by venture capitalists to determine specific rankings for companies that were not yet selling their products on a large scale or young startups with pre-earnings; it is not suitable for appraising a company with recurring revenue streams. A simple formula helps founders and investors avoid being misled based on expected return (Ikhwan and Rahadi 2022).

Researchers focusing on entrepreneurship and startups have begun to consider the applicability of the Berkus method due to its simplicity and practicality (Akkaya 2020; Demyanova 2018; Escartín et al. 2020).

In this paper we intend to analyze how the academic literature on entrepreneurship deals with the success factors identified by practitioners.

This leads us to propose the following research questions (RQs):

- (RQ1): What aspects, from those previously identified by business practice, make a startup succeed or fail, according to the literature?
- (RQ2): What is the relative importance of the success factors?
- (RQ3): What are the factors that mainly explain the success of a startup?

We have carried out a detailed, qualitative bibliographical review of 60 articles, most of which have been published between 2004 and 2019.

This work contributes to the literature on Start-up performance by discussing the relative importance that the academic literature gives to several success factors, as identified in business practice.

According to our text analysis, entrepreneurial success is primarily associated in the literature to these seven factors: Idea, CEO Decisions, Business model, Marketing, Team, Funding, Timing.

The rest of the paper is organized as follows: (2) Theoretical framework, (3) Method, (4) Results and (5) Success factors and entrepreneurial ecosystem and (6) Conclusions, implications and limitations.

2. Theoretical Framework

2.1. Success Factors in Entrepreneurial Ecosystems

Berkus (2006)¹ considers the following five key factors for the success of startups: Idea, Founding Team, having a Functional Prototype, Strategic Relations, and Traction or Invoicing; being all factors equally relevant in the model. These factors have had a wide impact on subsequent research. The Berkus methodology has served as the basis for calculating investments in Start-ups by applying a pre-money valuation based on how these five factors are valued in the start-ups to be invested (Dureux 2016). In addition, regarding the strategic relationships defined by Berkus, other authors such as Vanacker et al. (2013) emphasize that both venture capital investors and angel investors advocate efficient management, and as Collewaert (2012, 2016) indicates, they support entrepreneurs through planning. The importance of the invoicing factor in the Berkus context is recognized by the creative ways startups must employ to launch their businesses in an environment of limited resources (Urim and Imhonopi 2015).

Additionally, Gross (2015)² explores the performance of more than 200 companies and concludes that Timing is the most critical factor for the success of a start-up, followed by the Team and by the Idea. From the beginning, it is striking that neither the Business Model, the Idea, nor the Team appear in the top positions of this approach. Concretely, Gross ranks the five fundamental success factors of a start-up in the following order:

Timing:	synchronization in the time of launch to market (supply) of the product or service and demand.
Team:	cohesion and the capability for joint execution.
Idea:	value, disruptive capacity, or market fit.
Business model:	style or model chosen to increase the number of users or customers.
Funding:	obtaining the appropriate or necessary amount of funds at each development stage.

The analysis of the literature has suggested that, together with those five factors already discussed, there are 11 additional factors which can be considered as crucial.

These 11 new factors are as follows:

1. Decision strategy of the CEO (Chief Executive Officer; usually the founder), or the Leadership that he or she provides.
2. Marketing strategy used: the marketing activities carried out and the “mix” of channels used to launch the company.
3. Culture of non-stop evaluation: the start-up has some KPIs (Key Performance Indicators) for its analysis and has constant evaluation in its DNA.
4. Culture and/or existing values within the start-up: the culture of its founders and their ability to instill certain values in their team.
5. Ability to adapt to the environment: the ability to adapt to changes produced by a dynamic environment in which the start-up must operate (Díaz-Santamaría and Bulchand-Gidumal 2021).
6. Internal satisfaction within the start-up: optimism, internal climate.
7. Culture of training and/or development: seeing training as the basis for sustained growth and continuous innovation.

8. Diversity in the start-up: diversified staff.
9. Advisors or business board: it is essential to have a differentiated advisory team that has an impact on the decisions of the start-up.
10. Lean Start-up: the presence and active use of this methodology.
11. Previous experience of the Founders in the sector or business in which the start-up operates.

Thus, it can be seen how the literature places startups within the entrepreneurial ecosystem, and how it directly or indirectly identifies the success of the start-up with the success factors of entrepreneurship.

Payne (2011)³ redefines and reclassifies the success factors of Berkus (2006) and Gross (2015) into a list of seven factors (Achimská 2020). Table 1 provides the comparison between the factors identified by Berkus (2016), Gross (2015) and Payne (2011).

Table 1. Success factors according to selected contributions.

	Berkus (2016)	Weight	Gross (2015)	Weight	Payne (2011)	Weight
1	Idea	20%	Timing	42%	Strength of the Management Team	0–30%
2	Founding Team	20%	Team	32%	Size of the Opportunity (scalability)	0–25%
3	Functional Prototype	20%	Idea	28%	Product/Technology	0–15%
4	Strategic Relations	20%	Business Model	24%	Competitive Environment	0–10%
5	Traction or Turnover	20%	Funding	14%	Marketing/Sales Channels/Partnerships	0–10%
6	-	-	-	-	Need for Additional Investment	0–5%
7	-	-	-	-	Other	0–5%

Source: own elaboration.

2.2. Background and Literature

The literature has investigated, as well, the reasons for the success or failure of new companies. In this sense, some studies have covered success factors, while others have dealt with failure factors in entrepreneurship, being more extensive the literature that has deepened the analysis of success factors.

Success factors have been linked to certain amounts of turnover (more than 100,000 euros), as well as to the dedication of the founders, their commercial capacity, the age of the company, the number of employees, the existence of promoter partners in the company, the technological skills of the promoter partners and the startup's ability to exceed the break-even point (Díaz-Santamaría and Bulchand-Gidumal 2021).

For a successful entrepreneur to commit to entrepreneurial performance, three soft skills must come together: entrepreneurial passion, values, and personality (Tasnim et al. 2014). Obschonka et al. (2017) also studied soft skills of successful entrepreneurs and managers, but through a historiometric analysis (digital footprint) using Twitter timeline. They recognized the factors of independency, power driven, competitive skills and work alcoholism as the main indicators for achievement. Similarly, Saura et al. (2019) launched a sentiment analysis as well over Twitter and found the following aspects related with start-up success: sustainable business model, high level of employee profiles in start-ups, theoretical and educational support, participation in development or programs of institutions such as start-up incubators or accelerators, attitudes to investors and business angels. In addition, they found that the technologies and programming languages were also identified as important topics to consider. Razmus and Laguna (2018) identify six dimensions of entrepreneurial success from the external perspective of their stakeholders: entrepreneur satisfaction, entrepreneur work-life balance, firm social responsibility, firm reputation, employee satisfaction and client's satisfaction.

Pasayat et al. (2020) identified ten success categories in their meta-analytic approach: market and startup opportunity, venture team experience, financial resources, venture capitalist factors, external environment, venture related factors, characteristics of entrepreneur, human resources capabilities, performance measures (social media analytics and profit), and finally funding or economic factors. Rivera-Kempis et al. (2021) go further by list-

ing 20 important attributes for success, which are also integrated into three dimensions: knowledge, skills, and attitudes and values. [Santisteban et al. \(2021\)](#) identified 21 factors of success and linked them with the development stage (seed, early, growth, expansion, or exit). This study does not find any association between success and the following factors: gender of the entrepreneurs, academic background, competitors, business age, or environment dynamism.

[Prüfer and Prüfer \(2020\)](#) extracted keywords from online job vacancies, identifying the top three entrepreneurial skills as communication, self-starter and planning.

None of the top five reasons why startups fail, has to do with “Timing” ([CB Insights 2021](#)), since one of the main reasons is usually the choice of an unsuitable “Team” or the inadequate implementation of soft skills as managerial and commercial experience of the founders ([Bednár and Tarišková 2017](#); [Lopez Hernandez et al. 2018](#)). [Cardon et al. \(2011\)](#) through text analysis, gathered data from the major US newspapers and distinguished failures caused by circumstances that the entrepreneur cannot control (market forces, funding, financial and timing) from failure resulting from avoidable errors on the part of the entrepreneur (business model, management, unrealistic expectations and innovation). [Picken \(2017\)](#) clarifies that achieving success requires both the entrepreneur and the founding team to overcome eight obstacles, which are as follows: setting a direction and maintaining focus, positioning products/services in a large market, maintaining a client/market focus, building an organization and management team, providing effective processes and infrastructure, building financial capacity, developing an entrepreneurial culture, and managing risks and vulnerabilities.

Economic factors have been discussed regarding their relationship with successful entrepreneurship, without yet finding a consensus regarding how to solve the problem of raising financial resources at the start. Research on entrepreneurship from the Legitimacy Theory approach identifies as an innovative research area the inquiry about the need for financial sustainability of new companies, and the importance of influencing the evaluations of legitimacy of the evaluators ([Gordo Molina et al. 2022](#)). For [van Gelderen et al. \(2005\)](#), it is preferable to start with a small amount of capital. In addition, when evaluating the resources to finance their projects, entrepreneurs must consider an extra item for contingencies ([Sull 2004](#)). This can make financing in entrepreneurship a relevant obstacle to success (possible failure factor), leading to the analysis of other factors that counteract the lack of resources. In this sense, marketing is pointed out as a countermeasure to failure due to lack of financial resources. The lack of resources at the beginning of an entrepreneurial project makes the marketing strategy crucial, by providing quick access to the market. In the current approach to marketing, it has been identified how social networks can boost business by attracting new customers and, consequently, increasing revenue ([Cosenz and Noto 2018](#); [Mayer-Haug et al. 2013](#)). If an entrepreneur regularly contemplates how to create value for the company’s associates and shareholders, the project will have a much greater chance of success and in the process, the company will develop a good reputation ([Kuratko et al. 2007](#)). In addition, company location has been analyzed in order to determine its role as success factor, due to its influence on financial funds raising. [Díaz-Santamaría and Bulchand-Gidumal \(2021\)](#), in their analysis of the influence of location on startups in Spain (near Madrid or Barcelona) found a high and significant correlation between location and income level, however, the location was not important in relation to the probability of raising capital.

Furthermore, entrepreneurs are often referred to as sources of new ideas or innovators, as they bring new ideas to market, replacing old ones with inventions. Continuous innovation should be an important factor for a start-up due to the dynamism associated with the entrepreneurial environment, however, [Hyytinen et al. \(2015\)](#) highlights that the survival rate (3 years of life) of a company focused on innovation continuation is 7–8 percentage points lower (56% on average) than the average survival rate of non-innovation start-ups (63% on average). Thereby, innovation could be both a factor for a successful entrepreneurship and a failure factor.

Considering the factors of success and failure of entrepreneurship from the experience in the business practice, a content analysis will be carried out to assess the relevance of these factors in the literature on start-up companies.

3. Method

3.1. Analysis Procedure

Qualitative analysis procedure, known as qualitative research or qualitative data analysis, is based on the semantic analysis of the keywords defined for the search for relevant content of a subject under study, regardless of the software used to carry out the analysis. Thus, this analysis aims to extract an idea of an information group to be investigated, taking out the facts and identifying the key themes or main arguments, in order to measure the information content (Sandelowski 1995). Specifically, narrative research is a part of qualitative research based on the analysis of a discourse about an event located in a temporal context; through a coding scheme allows data to be separated into groups (Polkinghorne 1995). In the field of entrepreneurship research, qualitative analysis increasingly helps to understand taxonomies and configurations related to complex business and identify opportunities for future research (Leppänen et al. 2019). In economics, it has also been used together with quantitative analysis to map trends in research (Lima and de Assis Carlos Filho 2019; Shan et al. 2022).

Thus, within qualitative analysis the keywords must be selected in the research topic and attending to the research objective. In our research, for the selection of keywords to identify relevant content, an exhaustive review of articles in order to identify success factors in entrepreneurship has been carried out. Subsequently, a first analysis based on the root-meaning of each word has been carried out, also identifying synonyms with equal meaning. This first step is followed by a second and subsequent analysis to mining more detailed content in a selected group of articles which cover a high level of semantic communalities around the research topic.

Within the framework of our research (success factors of entrepreneurship in startups), the method used by Prüfer and Prüfer (2020) also applied a text analysis as the basis for data mining for entrepreneurship research; similarly, Cardon et al. (2011), use text analysis applied to newspapers to extract content analysis related to failed companies. Similarly, Saura et al. (2019) carry out a sentiment analysis on Twitter based on the identification of content through text, while Obschonka et al. (2017) apply it to the identification of soft skills of successful entrepreneurs and managers, placing them in historical context through the date (historiometric analysis). In addition, the text analysis is relevant in the meta-analytic approach, because the last one uses as support keywords or expressions based on previous text research, such as in Pasayat et al. (2020), who identified categories related to success process.

In our work, the qualitative analysis procedure is carried out in several stages. In the first stage, a review of contents related to success factors found in the specialized literature is carried out. In the second phase, a descriptive analysis and an analysis of the distribution of papers by communality of contents are carried out, by identifying the set of terms that saturates a percentage of terminology greater than 50%, specifically 65%. The third stage (final phase) is focused on the mapping of success factors by a multidimensional graphical analysis using bubbles, carried out with the R software. This analysis allows us to catalog the weight of a variable, in our case the success factor, based on more than three dimensions, allowing us to obtain a multidimensional and comparative joint vision of each factor based on more than three variables. Bubble analysis, where the data is replaced by bubbles, is useful because it allows to identify outliers, gaps and trends from a qualitative approach of contents, helping make concept maps on relevant content.

In the third stage, the location (by continent) is the categorical variable that serves to define the groups of factors to be compared. This analysis technique has been used for bibliometric analysis of relevant domains related to entrepreneurial universities (Forliano et al. 2021), and also in the scientometric analysis of entrepreneurship in small businesses and innova-

tion (Akpan 2021). It has also allowed a better understanding of the research structures of entrepreneurship through co-word (Phan Tan 2021). However, it has not been applied to the specific analysis for the mapping of success factors of start-ups in the entrepreneurship ecosystem.

3.2. Sample: Stages and Process

To adequately define the Systematic Literature Review (SLR), this research considers the approach of Booth et al. (2012), as well as the Cochrane review protocol (Higgins and Green 2011), which were applied in order to avoid bias. Thus, several sequential steps were applied following Grant and Booth (2009) for the SLR: selection and evaluation of the quality of the articles (Stage 1), data systematization (Stage 2) and data analysis (Stage 3).

Stage 1. Selection and quality assesment of articles

An initial sample was selected to monitor the articles whose contents fall within the objective of the investigation. Thus, our methodology to gather the articles for the study followed these steps (Brereton et al. 2007):

Selection of the following keywords in accord with Berkus (2006) and Gross (2015): “success”, “performance”, “innovation”, “startup” (start-up) and “entrepreneurship”. Full entrepreneurial and startup focus in a Google Scholar search.

The literature within the framework of the entrepreneurial ecosystem considers startups as essential engines for the development of entrepreneurship, understood as an innovation process focused on satisfying social demands. Within this approach, a search was carried out, which yielded 117 articles. The end of the time horizon for the search was established in 2019 (31 December 2019)⁴. From these 117 articles we selected those which focused on the entrepreneurship-startups approach, in accordance with the objective of the research. 60 articles fulfilled this condition.

Stage 2. Data systematization

The factors identified in the theoretical framework were catalogued, both by their root meaning and by synonyms with similar contextual meaning (see Table 2). Table 2 displays factors and associated synonyms (71), grouped by each of the 16 factors.

Table 2. Factors of analysis and their associated words/synonyms based on the 60 articles analysed in the study (Authors).

Factor of Study	Synonyms or Variables Found in the Articles Analysed
Timing	Timing, Startup Stages, Time, Moment, Opportunity
Team	Team, Collaboration, Cohesion, Teamwork, Cohesity
Idea	Idea, Innovation, Value, Product
Business Model	Business Model, Profit, Economic Model, Control, Business Plan
Funding	Financing, Financial Variables, Finance, Money, Funding, Funds
Ceo Decisions	CEO Decisions, Leadership, Ambiguity, Decision Making, Power, Management
Marketing	Marketing, Communication, Business Intelligence, Advertisement, Social Networks, Publicity
Culture of Evaluation	Evaluation, KPI, Constant Evaluation, Monitoring, Continuous Monitoring
Culture/Values	Cultural alignment, Values Alignment, Communication Strategy,

Table 2. Cont.

Factor of Study	Synonyms or Variables Found in the Articles Analysed
Dynamic Adaptation	Dynamic Adaptation, Stress, Speed, Dynamic capabilities, Reinvent, Vanguard
Satisfaction	Satisfaction, Fun, Optimism, Wellbeing
Training And Development	Training, Mentoring,
Diversity	Diversity, Mentality, Heterogeneity, Horizontal system
Advisors	Board, Advisors, Steering Committee
Lean Startup	Lean startup, Going lean, Prototype, Split testing, Continuous deployment
Founders Experience	Founder's Experience, Founder, Founders

Stage 3. Data analysis

Next, a statistical analysis of the frequency of the words was carried out thereby generating a “ranking” of the factors suggested by the literature as drivers of success in startups, ranging from “most important” to “least important”. Subsequently we analyzed results searching for differences by country or continent (see Appendices A and B).

Appendix C summarizes the conclusions and main insights of a sub-sample of 25 papers covering all these seven factors.

4. Results

4.1. Descriptive Text Analysis: Data Mining

The 16 study factors appear 572 times in total in the 60 articles analyzed. Table 3 details the number of appearances by factor in absolute and percentage values.

Table 3. Ranking of factors by occurrence and percentage of representation (weighting) in each article (Authors).

Ranking	Factor	Absolute Number of Appearances in Articles	Percentage	Cumulative Percentage
1	Idea	60	10.5%	10.5%
2	CEO decisions	59	10.3%	20.8%
3	Business model	57	10.0%	30.8%
4	Marketing	52	9.1%	39.9%
5	Team	51	8.9%	48.8%
6	Funding	48	8.4%	57.2%
7	Timing	45	7.9%	65.0%
8	Evaluation culture	33	5.8%	70.8%
9	Culture and values	30	5.2%	76.0%
10	Adaptation to the environment	28	4.9%	80.9%
11	Satisfaction	27	4.7%	85.7%
12	Training	26	4.5%	90.2%
13	Diversity	23	4.0%	94.2%
14	Advisors	18	3.1%	97.4%
15	Lean Start-up	15	2.6%	100.0%
		572	100%	

The factor known as Experience of the Founders has been eliminated, as it has no representation in the sample of articles selected for analysis. Thus, the retained factors are ranked around 15 success factors. The results obtained show that the 10 most important factors for the success of a start-up are the following:

1. Idea: present in the 60 articles analyzed

2. Decisions of the CEO
3. Business model
4. Marketing
5. Team
6. Funding
7. Timing
8. Evaluation Culture
9. Culture and Values of the Start-up
10. Adaptation to the environment

4.2. The Main Factors for Entrepreneurial Performance

As Table 3 and Figure 1 show, there is a substantial difference in the representation of the Timing factor (in the seventh place), which is present in 45 articles, compared to Evaluation Culture (in the eighth place), present in 33 articles.

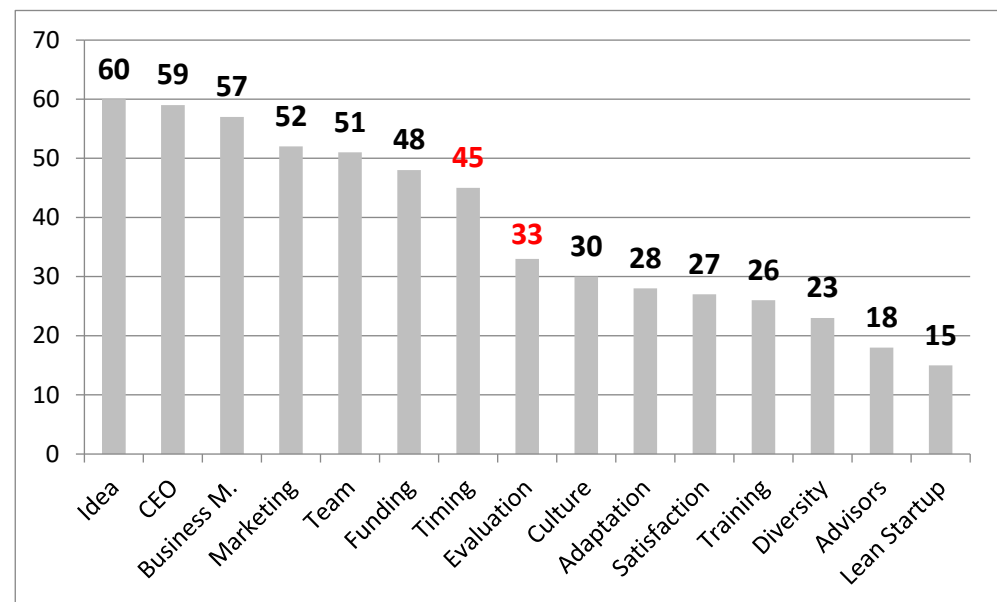


Figure 1. Ranking of the start-up success factors and the number of appearances within the 60 bibliographic sources chosen for the Study.

The highest difference in terms of the number of apparition of factors in articles is 12 and occurs between Timing and Evaluation. The seven factors before this gap achieve an aggregate weight of 65% (Figure 2 and Table 3). Thereby, a subsample was selected with the group of articles whose success factors covers approximately the 65% of more relevant success factors, being the group determined by total number of apparitions on the research literature.

The difference in the number of apparitions between factors is 2.9 on average (Figure 3). This implies that the distance between factors seven and eight is indeed remarkable, suggesting that factors 1 to 7 and 8 to 15 encompass two separate categories.

The number of factors we identify as more important (seven) is close to the number used by Berkus (2006), Gross (2015), Payne's (2011), Saura et al. (2019) and Razmus and Laguna (2018), five or six factors; it is smaller than the number of factors used by Rivera-Kempis et al. (2021), and Santisteban et al. (2021), 20 and 21 factors, respectively. Our seven success factors represent a similar number to the eight obstacles identified by Picken (2017).

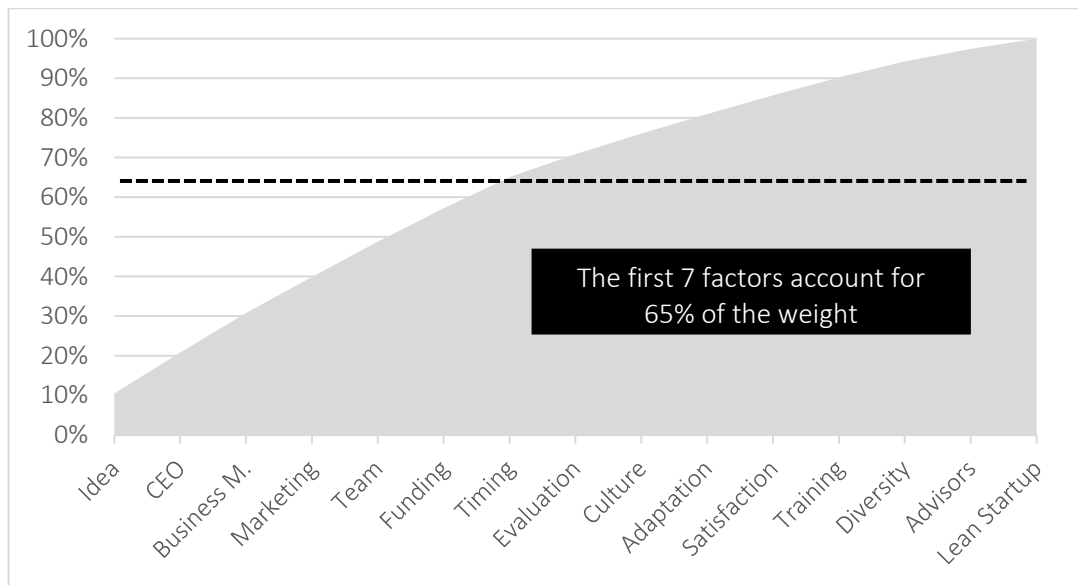


Figure 2. Cumulative Weight of factors obtained from Table 2. The strongest area of impact can be clearly seen among the first seven factors.

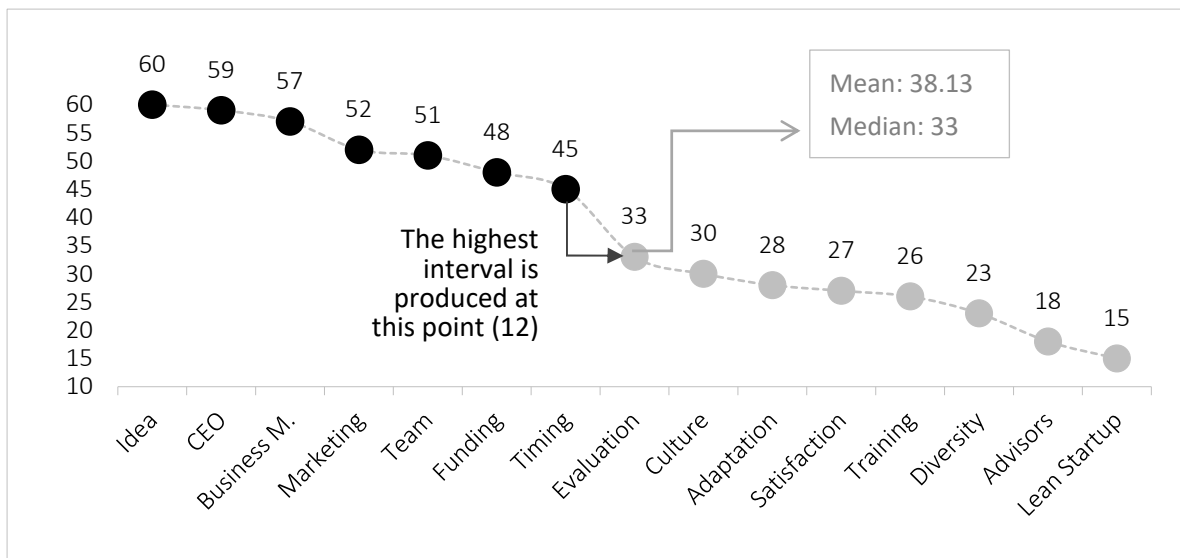


Figure 3. Existing differences-jump between Timing and Evaluation.

Entrepreneurial success, according to our text analysis (see Table 4), is primarily associated in the literature to the first seven factors: Idea, CEO Decisions, Business model, Marketing, Team, Funding, Timing. It can be noticed that, when compared with Gross (2015), there are two new success factors among the main ones:

CEO Decisions, in the second position.

The type of Marketing Strategy, in fourth position.

Table 4. Comparison of factors found in this paper with Gross (2015) and Berkus (2006).

Ranking Results in This Paper		Weight	Gross (2015)	Weight	Berkus (2006)	Weight
1	Idea	10.5%	Timing	42%	Idea	20%
2	CEO Decisions	10.3%	Team	32%	Founding Team	20%
3	Business Model	10.0%	Idea	28%	Operational Prototype	20%
4	Marketing	9.1%	Business Model	24%	Strategic Relations	20%
5	Team	8.9%	Funding	14%	Traction or Revenues	20%
6	Funding	8.4%	-	-	-	-
7	Timing	7.9%	-	-	-	-
8	Others (8 factors)	35%	-	-	-	-

Source: own elaboration.

5. Success Factors and Entrepreneurial Ecosystem

5.1. Analysis of Main Success Factors by Location

There are differences in the weighting of factors among geographical areas of affiliation of the authors represented in our literature sample. These differences may also provide useful insights regarding the relative importance given to success factors in different social and cultural environments. The variable of location in our research is “country” and it displays the research country. We have classified the articles according to the country of affiliation of the first author.

In qualitative research based in a narrative or disclosure it is common to take location as a key variable, because location is usually associated to cultural features. If no differences are found when considering the location variable (company or employer), this could indicate that the sector or sectors analyzed are homogeneous (Herrador-Alcaide and Hernandez-Solis 2019), and consequently, business culture are also close.

Some research analyzes entrepreneurship regarding location choices, showing that there is evidence that location choice is relevant for entrepreneurship (Yu and Artz 2019). Other authors add that the differences in entrepreneurship between countries reside both in market conditions and in cultural values assumed by entrepreneurs, due to the entrepreneurial ecosystem differences (Hemmert et al. 2019). Furthermore, certain findings suggest that differences between business accelerators may be due to economic differences in the performance of their member ventures (Chan et al. 2020).

Therefore, cultural and economic differences may also influence researchers. Table 5 details the geographical distribution of articles (by affiliation of the first author) in the top 10 countries. US is the first country, as could be expected.

Table 5. Top 10 countries represented in the articles that were extracted as a sample for this study. A complete table with all 27 countries appears in Appendix A.

Country	Number of Articles	Percentage
The United States	18	30%
England	4	7%
The Netherlands	4	7%
Italy	3	5%
Canada	3	5%
Brazil	3	5%
Singapore	2	3%
South Korea	2	3%
France	2	3%
Spain	2	3%
TOTAL (of 60 articles)		72%

In terms of the number of articles per “continent”, the most representative are the following: Europe with 23 (38.3%), North America (USA and Canada) with 21 (35%), and finally Asia, with 11 studies (18.3%) (see Figure 4). Europe and North America concentrate

more than 35% of the articles each, and together they concentrate more than 73% of the articles. On the other hand, South America and Oceania jointly concentrate just over 8% of the articles. These data confine the research results to the context of the academic research culture in North America and Europe. Consequently, the results could indicate, according to the affiliation of the researchers, differences in the business culture of the environment.

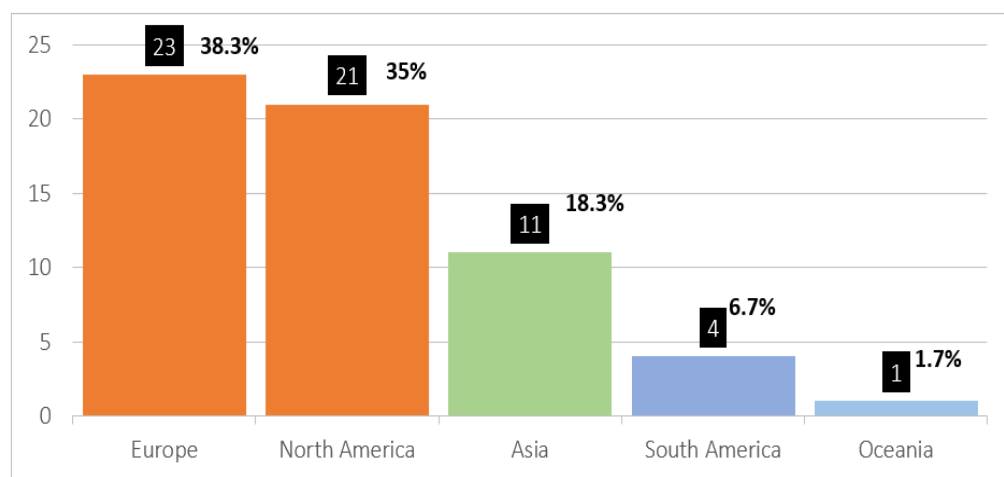


Figure 4. Frequency and percentage of articles analyzed by “Continent” of the sample of 60 bibliographic articles.

The order of the seven key factors in each of the first three continents, Europe, North America and Asia, is displayed in Figure 5. Asia contributes with a new factor to the ranking of the top seven. The figures in percentage represent the number of times each factor appears in the literature from this area, relative to the number of total apparitions. Thus, Figure 5 (in red) also shows the previous accumulated results obtained by the seven factors in the entire sample of literature, without taking into account differences by continent. Averages of all the factors in all 60 articles analyzed are shown in red. Green corresponds to Europe; Blue to North America; Grey to Asia. Results for Asia suggest that a new factor, evaluation culture, should be included in the top 7. Instead, Team is out of the ranking for this continent. See the general table with all the continents in Appendix A.

The analysis of the distribution by continents suggests the following ideas:

- The Idea factor is always the first, or the “Top 1” in all the continents analyzed (see Appendix B with data in tables). In Europe the Idea and Business Model factors are crucial; they are equally valued and occupy the first position. However, for North America, Idea and CEO are the most important factors and reach an above-average score.
- In Europe (EU), and especially in Asia, the Timing factor is dominant. In North America, however, timing registers the smallest percentage.
- The Business model factor is considered very important in Europe, even surpassing the factor considered second on average, which is the CEO factor. Therefore, Business Model is the second most important factor in Europe, rather than CEO.
- For Asia, the Marketing factor is very relevant, but in Europe this factor achieves the smallest score, which is considerably lower than the average obtained by all the areas.
- Marketing is the fourth factor in terms of relative importance in all areas except Europe, where the fourth place is occupied by Team.
- The group of seven factors remains similar in North America (in the same order) and in Europe (with a rise in the rankings of the Business Model and Team factors) but is different in Asia, here the order of the factors changes remarkably because the Team factor goes to the eighth place thereby abandoning the established ranking of the seven factors. The Culture of Evaluation appears in the ranking and is more important than the Team only for Asia.

- The Funding factor is the last one for all areas except Asia, where it reaches a preferential position regarding the other continents; it achieves the same score than Business model and Marketing (see Appendix B). these three factors occupy the third place among all factors for Asia.

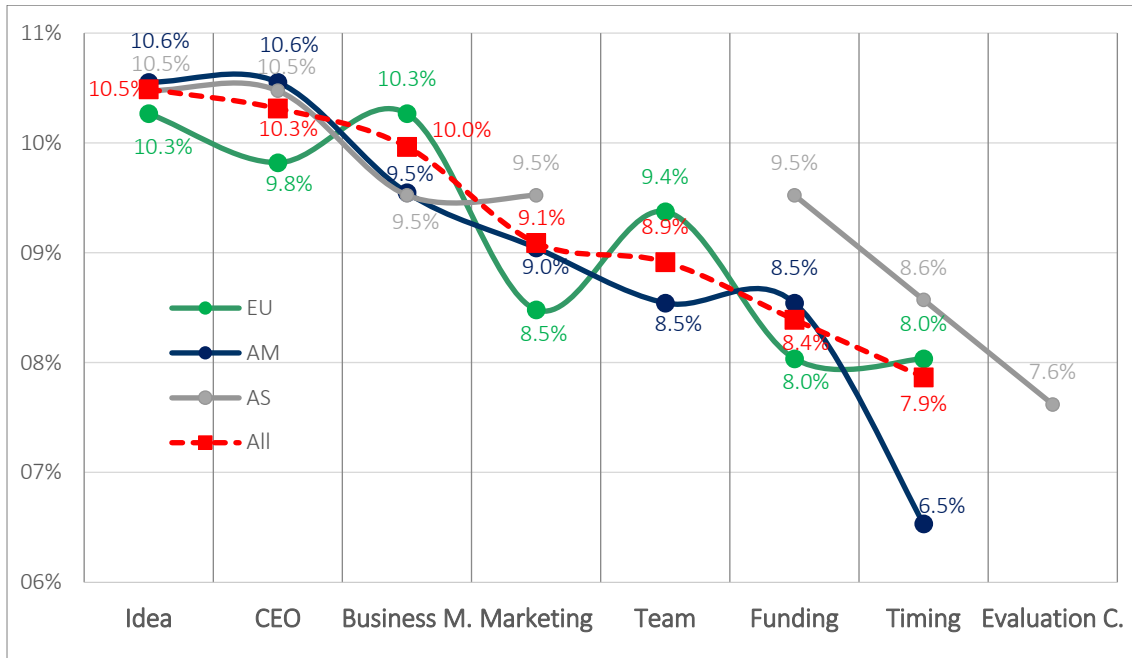


Figure 5. Factor Differences by Continent.

In conclusion, the seven factors obtain a rather similar weight across continents, except Asia, where the Team factor does not belong to the “top seven”, and where a new factor, Culture of Evaluation, attains more importance than Funding. For Europe, the Idea and Business Model factors are more important, whereas the top position for North America is held by the Idea factor, together with CEO. The Business model factor and, most of all Team, have greater weight in Europe than in North America. However, the opposite is true with Marketing, as it is more important for North America. Timing is considered less important, except in Asia.

5.2. Multidimensional Mapping of Success Factors in Start-Ups Companies

Not all the papers that compose our sample deal with all the seven key factors. There is a sub-sample of 25 articles that deal with the seven factors in full, while the rest cover only some of them (Table 6).

Table 6. Sub-sample of 25 articles that deal with the total seven factors: CORE 7 SF.

Number of Factors Found	Articles
7	25
6	24
5	9
4	2
TOTAL	60

Source: own elaboration.

Visually, findings are represented in the next figure.

Figure 6 details the authors of the top 25 articles and the ranking of the factors by relevancy grouped by continents. Our map allows us to catalog the success factors in start-ups in five dimensions simultaneously: continent, number of papers, factor, authors,

and relative frequency of the factor. Thus, the map must be read from out to indoor. The external circles show the relevant group of factors identified in the literature by continent and the number of articles. Inside each circle, smaller circles show the articles by author for the continent, and the main success factor associated to these authors and continents. Thus, the size of the indoor circle shows the relevancy of the factor in research from the continent, while each colour identifies a specific factor. The number inside each indoor circle shows the frequency for this factor (root word and synonyms) in the research literature for the specific continent, factor and authors.

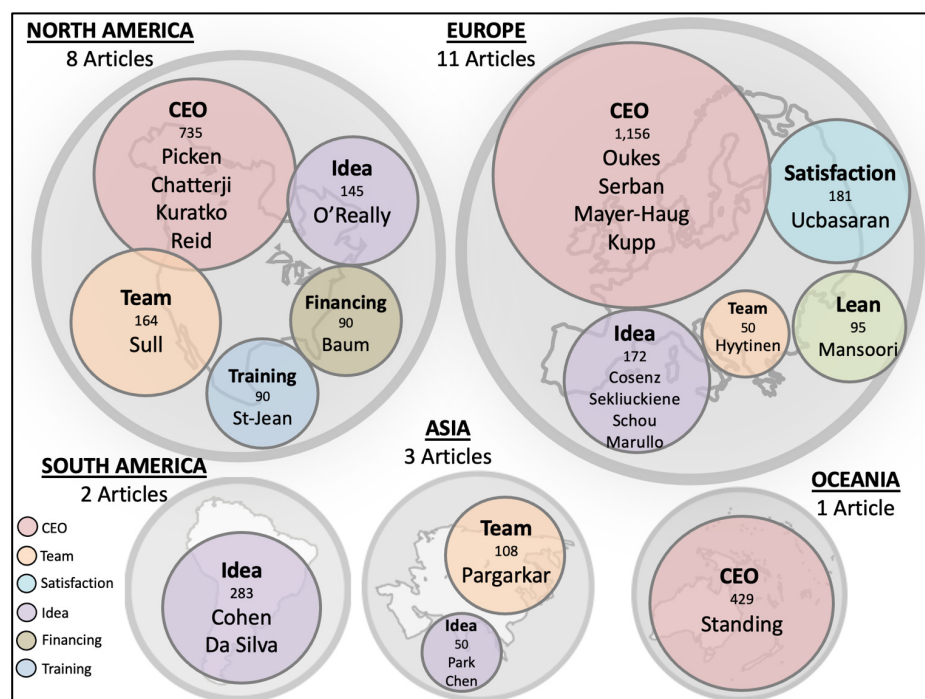


Figure 6. Bubble Chart: number of articles per continent. The dominant factor with authors related, and the presence of the factor (number of times/frequency that the key factor/word, appears in the articles studied what gives the circle size and color).

For example, the interpretation for Asia would be as follows: Continent: Asia→Research articles: 3→start-up success factors: 2 (<<Idea>> and <<Team>>)→Authors: 3 (2 for <<Idea>> and 1 for <<Team>>)→Frequency: 50 for <<Idea>> and 108 for <<Team>>. Thus, our map allows to reduce a key concept of start-ups success associating it to a research success factor linked to a continent and sizing its relevancy by articles-authors-frequency.

Our mapping manages to explain through five dimensions the conceptualization of the most relevant success factors in the research literature for each continent, allowing to show the specific weight of each start-up success factor on the totality of each group and respect to the total of literature.

According to our map, the four most representative factors for this sample of studies are the following: the CEO, Satisfaction (only in Europe), the Idea, and the Team, in that order. It is interesting to point out that for European and North American authors, the CEO is the most important factor⁵, with four representative authors for each continent, but for Europe however, this factor takes a greater weight or relevance (+36%), with 1156 keyword repetitions in the texts, compared to only 735 for North America. For Europe, internal Satisfaction holds the second place in importance for a start-up, and for North America this position is held by the Team (see Table 7).

Table 7. Success factors in North America vs. Europe (Authors).

	Total Results	Weight	North America	Weight	Europe	Weight
1	Idea	10.5%	Idea	10.6%	Idea	10.3%
2	CEO Decisions	10.3%	CEO Decisions	10.6%	Business Model	10.3%
3	Business Model	10.0%	Business Model	9.5%	CEO Decisions	9.8%
4	Marketing	9.1%	Marketing	9.0%	Team	9.4%
5	Team	8.9%	Team	8.5%	Marketing	8.5%
6	Funding	8.4%	Funding	8.5%	Funding	8.0%
7	Timing	7.9%	Timing	6.0%	Timing	8.0%
	TOTAL	65.1%	TOTAL	63.3%	TOTAL	64.3

Appendix C provides a summary of the key messages and conclusions from these 25 articles.

6. Conclusions, Implications and Limitations

This study explores the more relevant factors for the success of a startup according to the literature through the analysis of 60 articles.

The first contribution of our study is its approach: it is a qualitative review of the academic literature on success in entrepreneurship through startups with a very specific objective: to analyze how the factors of success endorsed by business practice appear in academic literature. In other words, we show the intersection set between the success factors of entrepreneurial business practice and the success factors of scientific research on entrepreneurship. In this way, through the intersection between business practice and academic literature, we shed some light on entrepreneurial success as defined by practitioners and discussed by academic research, helping incorporate business experience into academic theory.

The second contribution of our study is the set qualitative findings related to entrepreneurial success factors. In this sense, starting from a set of 16 factors endorsed by business practice, we identify through our analysis a core of seven success factors (Core-7 SF) that have been explored by the academic literature; our analysis suggests that these seven factors are the most relevant when explaining the success of startups. The analysis of the specific weights indicates that there is a representative gap between the first seven factors (with a weight of 65%) and the other eight that come in the next ranking positions. These factors are as follows: Idea, CEO Decisions, Business model, the type of Marketing used, Team, Funding obtained, and Market timing. In this case, 7 out of 16 factors represent 65% of the total number of apparitions. This percentage or weight is very similar when analyzing the impact of the seven factors by continent: Europe (64.3%), North America (63.3%), and Asia (65.7%).

The third contribution is that we identify two additional factors that impact as well on the performance of any entrepreneurial project. The statistical analysis confirms that these two new factors (CEO Decisions and Marketing) are directly related to the performance and success of an entrepreneurial project, together with the previous five: Idea, Business Model, Team, Funding, and Timing. In particular:

- CEO Decisions appear in the second position. This factor encompasses the decision-making skills of the CEO, the ability to build a team, and the capacity for individual execution.
- The type of Marketing used is in fourth position. This factor is related to the execution of marketing campaigns and the selection of the appropriate marketing mix channels.

The fourth contribution of our research is the identification of the relative ranking of the Core-7 SF factors according to the author's country. Our analysis suggests that the "Idea" is always the first factor in any geographical location of the academic research analyzed. This is important because it allows us to extrapolate the conclusion that the "Idea" as a factor of business success should be considered in the launching of Start-ups anywhere,

despite the fact that it comes from the business practice developed mainly in the United States (US) through the Berkus model. However, the second most relevant success factor of the Core-7 SF is not unique in the academic literature according to the geographical affiliation of the authors. Thus, the second relevant factor is the Business Model for Europe and the CEO in North America. This result is also important because it may be indicating the existence of different business cultures regarding entrepreneurship, which have This implies that these factors cannot be applied to the evaluation of the individual entrepreneur, nor are they valid to measure individual traits of entrepreneurial behavior been reflected in the academic literature in different ways. This could open new and interesting future lines of research in this field. In addition, we highlight that in Europe the Business Model is usually valued more than the CEO and the Team, above Marketing. Likewise, Asian authors give greater importance to Marketing, while the team is not among the main seven factors; however, they introduce a new factor, the Culture of Evaluation.

Our analysis of the success factors in entrepreneurship presents limitations regarding the scope of our conclusions. Our analysis has been framed within entrepreneurship ecosystems, considering Start-ups as vehicles for entrepreneurship. This implies that the main messages of the paper cannot be applied to the evaluation of the individual entrepreneur, nor are they valid to measure individual traits of entrepreneurial behavior.

Furthermore, the consideration of the different ranking of the second and subsequent success factors across continents suggests new lines of research which may deal with this aspect more thoroughly. Moreover, future research may also consider how academic literature is being incorporated into teaching, and specifically, the teaching perspective in relation to success factors.

Evaluation of entrepreneurial projects in their different phases (initial stage or seed, potential access to incubators, more intermediate stages) and research on these issues may consider the evaluation of these seven factors. In addition, training plans for entrepreneurs may also consider the enhancement of the seven factors identified.

Researchers in this field could refine our findings by adding new information from entrepreneurs and real projects, increasing the number of keywords or assessing the robustness of the weights obtained in our analysis.

Author Contributions: Conceptualization, J.S.-B., B.S.-R. and T.C.H.-A.; methodology: J.S.-B., B.S.-R. and T.C.H.-A.; writing-original draft preparation, J.S.-B., B.S.-R. and T.C.H.-A.; writing-review and editing, J.S.-B., B.S.-R. and T.C.H.-A.; supervision, B.S.-R. and T.C.H.-A. All authors have read and agreed to the published version of the manuscript.

Funding: This research received no external funding.

Institutional Review Board Statement: Not applicable.

Informed Consent Statement: Not applicable.

Data Availability Statement: Not applicable.

Conflicts of Interest: The authors declare no conflict of interest.

Appendix A

Table of country representation (27) obtained from the University of the first signatory of the sample of articles, together with the number of articles per country and their percentage of the total.

Country	Number of Articles	Percentage
The United States	18	30%
England	4	7%
The Netherlands	4	7%
Italy	3	5%

Country	Number of Articles	Percentage
Canada	3	5%
Brazil	3	5%
Singapore	2	3%
South Korea	2	3%
France	2	3%
Spain	2	3%
Thailand	1	2%
Sweden	1	2%
Portugal	1	2%
Malaysia	1	2%
Lithuania	1	2%
Japan	1	2%
Israel	1	2%
Iran	1	2%
India	1	2%
Finland	1	2%
Denmark	1	2%
China	1	2%
Chile	1	2%
Belgium	1	2%
Austria	1	2%
Australia	1	2%
Germany	1	2%
TOTAL	60	100%

Source: own elaboration.

Appendix B

Table of presence in the number of articles of the seven study factors by continent together with the weighting or relative weight and its associated ranking.

NORTH AMERICA				ASIA			
Ranking	Factor	Presence	Weight	Ranking	Factor	Presence	Weight
1	Idea	21	10.6%	1	Idea	11	10.5%
2	CEO	21	10.6%	2	CEO	11	10.5%
3	Business model	19	9.5%	3	Business model	10	9.5%
4	Marketing	18	9.0%	4	Marketing	10	9.5%
5	Team	17	8.5%	5	Funding	10	9.5%
6	Funding	17	8.5%	6	Timing	9	8.6%
7	Timing	13	6.5%	7	Evaluation Culture	8	7.6%
TOTAL WEIGHT 7 FACTORS			63.3	TOTAL WEIGHT 7 FACTORS			65.7
8	Culture	11	5.5%	8	Team	8	7.6%
9	Evaluation Culture	11	5.5%	9	Satisfaction	6	5.7%
10	Satisfaction	11	5.5%	10	Advisors	5	4.8%
11	Training	10	5.0%	11	Adaptation	5	4.8%
12	Adaptation	9	4.5%	12	Culture	4	3.8%
13	Advisors	8	4.0%	13	Diversity	3	2.9%
14	Diversity	8	4.0%	14	Training	3	2.9%
15	Lean Start-up	5	2.5%	15	Lean Start-up	2	1.9%

SOUTH AMERICA				EUROPE			
Ranking	Factor	Presence	Weight	Ranking	Factor	Presence	Weight
1	Idea	4	12.1%	1	Idea	23	10.3%
2	CEO	4	12.1%	2	Business model	23	10.3%
3	Business model	4	12.1%	3	CEO	22	9.8%
4	Marketing	4	12.1%	4	Team	21	9.4%
5	Team	4	12.1%	5	Marketing	19	8.5%
6	Timing	4	12.1%	6	Funding	18	8.0%
7	Culture	2	6.1%	7	Timing	18	8.0%
TOTAL WEIGHT 7 FACTORS			78.8	TOTAL WEIGHT 7 FACTORS			64.3
8	Evaluation Culture	2	6.1%	8	Culture	13	5.8%
9	Funding	2	6.1%	9	Adaptation	12	5.4%
10	Advisors	1	3.0%	10	Diversity	12	5.4%
11	Adaptation	1	3.0%	11	Evaluation Culture	11	4.9%
12	Training	1	3.0%	12	Training	11	4.9%
13	Diversity	0	0.0%	13	Satisfaction	10	4.5%
14	Lean Start-up	0	0.0%	14	Lean Start-up	7	3.1%
15	Satisfaction	0	0.0%	15	Advisors	4	1.8%

OCEANIA			
Ranking	Factor	Presence	Weight
1	Business model	1	9.1%
2	CEO	1	9.1%
3	Adaptation	1	9.1%
4	Evaluation	1	9.1%
5	Funding	1	9.1%
6	Idea	1	9.1%
7	Lean Start-up	1	9.1%
TOTAL WEIGHT 7 FACTORS			63.6
8	Marketing	1	9.1%
9	Timing	1	9.1%
10	Team	1	9.1%
11	Training	1	9.1%
12	Advisors	0	0.0%
13	Culture	0	0.0%
14	Diversity	0	0.0%
15	Satisfaction	0	0.0%

Source: own elaboration.

Appendix C

Narrative review of the 25 articles with the greatest out of the 60 studied, including the authors, and listed in alphabetical order. These 25 articles deal with all 7 factors for the success of a start-up found in the study.

Author	Objective	Results
(Baum and Silverman 2004)	Venture capital companies: they choose successful start-ups or build the success of the start-up.	The technological capacity is important, but also those start-ups that need advice on business management. The most influential factors for investment are: partnerships, patents, and good management skills.
(Chatterji et al. 2019)	To explore the influence of the advice that entrepreneurs receive.	Mentors with a formal approach to managing people made them grow by 28% and were 10% less likely to fail than those working with an informal approach to people management.
(Chen and Zhu 2008)	Success in entrepreneurs with an academic background compared to no background whatsoever.	Academic characteristics (going to university) are detrimental to economic performance. However, they have a positive influence on growth, number of employees, and satisfaction.
(Cohen and Kietzmann 2014)	Explore sustainable and emerging business models by analysing their relationship with local government.	Greater integration between shared mobility operators and cities has the potential to minimise conflicts between government agencies and increase the sustainability of the business model. Objective: to be aligned with the results expected by government agencies.
(Cosenz and Noto 2018)	The objective is to simplify the knowledge of a business system.	Exploration of different strategic solutions using simulation. The results show that the use of clear KPIs promotes growth.
(Hyytinen et al. 2015)	Association between the innovation of a start-up and its survival.	The survival rate (3 years of life) of a company dedicated to innovation is 7–8 percentage points lower (56% on average) than the average survival rate of new companies not dedicated to innovation (63% on average).
(Kupp et al. 2017)	Corporate accelerators as an object of study.	Five success factors for corporate acceleration programmes were identified: clear objectives (transparency and alignment with the organisation), start-up promoters, large external network, management support, and definition of clear KPIs.
(Kuratko et al. 2007)	Investigate the relationship between stakeholder visibility, the position of the organization, and business intensity.	If the corporate entrepreneur considers how he or she can create value for the company's stakeholders, corporate entrepreneurship will have a much greater chance of success than simply focusing on reducing costs or short-term profits.
(Mansoori et al. 2019)	To investigate the influence of the Lean Start-up methodology	The results indicate that the Lean Start-up methodology positively influences the evolution of the relationship between entrepreneurs and coaches.
(Marullo et al. 2018)	Open Innovation as a crucial organisational factor that determines the success of a start-up.	Their work proposes eight research hypotheses that link internal resources (technology, finances, and human capital), which makes it possible for a start-up to develop financially with its initial performance, and it was concluded that these were significant.
(Mayer-Haug et al. 2013)	Link business talent to determine its connection to performance results.	Relevant variables proved to be experience and skills, education, planning, team size, and the internet—the way marketing and social media are used has become an important variable even when resources are lacking.

Author	Objective	Results
(O'Reilly and Binns 2019)	Illustrate how two successful companies (Amazon and IBM) have developed approaches to address innovation	Companies must master three different stages or disciplines: idea generation (ideation), incubation (validation), and growth (scaling). Successful innovation requires leaders to improve the management of these stages, especially in the scaling phase.
(Oukes et al. 2017)	Explore how structural and behavioural power intervenes in a start-up's relationships with its partners.	Structural power is based on the control of resources, position in the business network, and the formal position in the business environment. The power of the start-up is mainly focused on one foundation: conciliatory tactics or power-shifting tactics, and not on the three mentioned previously.
(Pangarkar and Wu 2013)	A greater number of alliances, or the greater diversity of alliance partners, improves performance.	With more alliances, relationships are managed more efficiently and effectively, and performance improves. The results also suggest that companies improve their performance if their alliances are formed with diverse, rather than similar partners.
(Park et al. 2018)	Effect of technology and market forces on the commercial performance of SME support services.	Support services for SMEs had a direct impact on their performance. Such services also indirectly influenced the performance of SMEs by contributing to the decision-making skills of their executives
(Picken 2017)	To describe the essential tasks to be carried out and provide policy guidelines for the start-up.	The eight obstacles to success are the following: (1) establishing a direction and maintaining focus, (2) positioning products/services in another market, (3) maintaining a client/market focus, (4) building an organisation and management team, (5) developing effective processes and infrastructure, (6) building financial capacity, (7) developing a business culture, and (8) managing risks and vulnerabilities.
(Piñeiro et al. 2017)	Confirm how companies are using the Business Model Canvas.	The start-up that did not use the Business Model Canvas achieved continuous and undisrupted development, or in other words, this company performed better at the developmental level than the other two that used the Business Model Canvas.
(Reid et al. 2018)	Study the relationship between leadership and entrepreneurial grants.	The statistical relationship between leadership and entrepreneurship gives reliable and positive results. These two variables have thus been validated for future studies.
(Schou 2016)	Orientation of local government toward business initiatives; influence on the organisation and adaptation of local business policy.	Three factors were found: collaboration, adaptability and entrepreneurial orientation. The more positive the orientation of local government toward entrepreneurship, the better the adaptability of the enterprise and collaboration in the entrepreneurial support system.
(Sekliuckiene et al. 2018)	Understand the stages of business development.	The importance of business learning increases greatly in the start-up phase. In the <i>seed</i> phase, it is essential to develop social skills and use social networks, which contribute to the development of the social capital of a start-up.
(Serban and Roberts 2016)	Shared leadership as a mediator between the task, the team, and the results.	Meaningful and positive relationships: the value of shared leadership and how this led to high levels of quality work and overall satisfaction with its performance.

Author	Objective	Results
(Standing and Mattsson 2018)	To search for key issues and methods used in digital business development.	Leadership is an important variable. A simple, dynamic business model provides a differentiating value in a start-up (given its organic structure).
(St-Jean and Mathieu 2015)	Investigate the usefulness of SCCT (social cognitive career theory) in understanding the effects of mentoring.	The usefulness of SCCT in the study of business careers stands out. Furthermore, this study demonstrates the effect of business self-sufficiency on satisfaction and the intention to stay in business during career development.
(Sull 2004)	How start-ups and businesses deal with uncertainty while looking for opportunities.	Proper business management is shown to be a series of iterative experiments that systematically determine how much capital needs to be raised. The funds should always include an extra item for contingencies.
(Ucbasaran et al. 2010)	Explore whether previous business experience promotes or prevents comparative optimism in entrepreneurs.	Entrepreneurs with previous experience in one or more failed ventures are less likely than new entrepreneurs to show comparative optimism in their own businesses; however, they do show comparative optimism with regard to similar projects by other entrepreneurs.

Source: own elaboration.

Notes

- ¹ Dave Berkus is regarded as one of the most active angel investors in the US, with holdings in more than 180 technology investments, and he currently manages Wayfare Ventures and two seed-angel venture capital funds. Berkus is the author of “Basic Berkonomics”, “Berkonomics”, “Advanced Berkonomics”, and “Extending the Runway”, the essential business literature for all early-stage targeting resources. In 2011, Berkus was named “Technology Leader of the Year” by the Los Angeles County, California Board of Supervisors, and was also named “Director of the Year, Early Stage Companies” by The Forum. for Corporate Directors for his successful leadership and CEO coaching efforts.
- ² Gross is the founder of the “Idealab Incubator technology”, as well as 100 successful companies in the last 30 years. One of his greatest successes has been creating “GoTo.com”, a company that designed an innovative business model based on a search engine different from Google, but which is often linked conceptually (mainly in Silicon Valley) as the antecedent of strategies SEM (Search Engine Marketing) of Google today (Oremus 2013).
- ³ Payne’s (2011) Scorecard valuation method allows startups to be compared, ranking them against other recently funded companies in the same geographic region. Specifically, the Scorecard Method adjusts the estimated average value, coming from other comparable startups, to obtain the initial pre-money valuation. This method crosses this estimated market value with the success factors and their associated percentage.
- ⁴ We decided to take 2019 as the end date of the sampling period because of the disruption in business activity and academic research caused by COVID-19 in 2020 and 2021. At the current date (2022) it is not possible yet to obtain a historical series of data after the pandemic that would allow a post-COVID-19 vs. Pre-COVID-19 comparison.
- ⁵ However, it is important to remember that the Idea, always is ranked in the first place in importance, both in the analysis of all the articles (60), and in the analysis by country and continent. It is only in this sample of articles based on all seven factors (25 articles) where the CEO factor gets the “top one position”.

References

- Achimská, Veronika. 2020. Start-ups, bearers of innovation in globalizing environment and their valuation. In *SHS Web of Conferences*. Les Ulis: EDP Sciences, vol. 74, p. 01001.
- Akkaya, Murat. 2020. Startup valuation: Theories, models, and future. In *Valuation Challenges and Solutions in Contemporary Businesses*. Hershey: IGI Global, pp. 137–56.
- Akpan, Ikpe Justice. 2021. Scientometric Evaluation and Visual Analytics of the Scientific Literature Production on Entrepreneurship, Small Business Ventures, and Innovation. *Journal of Small Business & Entrepreneurship* 33: 717–45.
- Amis, David, Howard H. Stevenson, and Jocelyn Dinnin. 2001. *Winning Angels*. London: Financial Times Prentice Hall.
- Aulet, Bill. 2013. *Disciplined Entrepreneurship: 24 Steps to a Successful Startup*. Hoboken: John Wiley & Sons.
- Aulet, William, and Fiona E. Murray. 2013. *A Tale of Two Entrepreneurs: Understanding Differences in the Types of Entrepreneurship in the Economy*. Kansas City: Ewing Marion Kauffman Foundation.

- Baum, Joel A. C., and Brian S. Silverman. 2004. Picking winners or building them? Alliance, intellectual, and human capital as selection criteria in venture financing and performance of biotechnology startups. *Journal of Business Venturing* 19: 411–36. [CrossRef]
- Bednár, Richard, and Natália Tarišková. 2017. Indicators of startup failure. *International Scientific Journals* 2: 238–40.
- Berkus, Dave. 2006. *Extending the Runway: Leadership Strategies for Venture Capitalists and Executives of Funded Companies*. Boston: Aspatore Books.
- Berkus, Dave. 2016. After 20 Years: Updating the Berkus Method of Valuation. Available online: <https://www.angelcapitalassociation.org/blog/after-20-years-updating-the-berkus-method-of-valuation/> (accessed on 3 August 2022).
- Booth, Andrew, Diana Papaioannou, and Anthea Sutton. 2012. *Systematic Approaches to a Successful Literature Review*. London: SAGE Publications Ltd.
- Brandstätter, Hermann. 2011. Personality aspects of entrepreneurship: A look at five meta-analyses. *Personality and Individual Differences* 51: 222–30. [CrossRef]
- Brereton, Pearl, Barbara A. Kitchenham, David Budgen, Mark Turner, and Mohamed Khalil. 2007. Lessons from applying the systematic literature review process within the software engineering domain. *Journal of Systems and Software* 80: 571–83. [CrossRef]
- Cardon, Melissa S., Christopher E. Stevens, and D. Ryland Potter. 2011. Misfortunes or mistakes? Cultural sensemaking of entrepreneurial failure. *Journal of Business Venturing* 26: 79–92. [CrossRef]
- CB Insights. 2021. Top 12 Reasons Startup Fail. Available online: <https://www.cbinsights.com/research/startup-failure-reasons-top/> (accessed on 3 August 2022).
- Chan, Chien Seng Richard, Pankaj C. Patel, and Phillip H. Phan. 2020. Do differences among accelerators explain differences in the performance of member ventures? Evidence from 117 accelerators in 22 countries. *Strategic Entrepreneurship Journal* 14: 224–39. [CrossRef]
- Chatterji, Aaron, Solène Delecourt, Sarique Hasan, and Rembrand Koning. 2019. When does advice impact startup performance? *Strategic Management Journal* 40: 331–56. [CrossRef]
- Chen, Jin, and Xueyan Zhu. 2008. A research on the relationship between academic entrepreneurs and enterprise performance: A three-dimension model. *Frontiers of Business Research in China* 2: 155–69. [CrossRef]
- Cohen, Boyd, and Jan Kietzmann. 2014. Ride On! Mobility Business Models for the Sharing Economy. *Organization & Environment* 27: 279–96.
- Collewaert, Veroniek. 2012. Angel investors' and entrepreneurs' intentions to exit their ventures: A conflict perspective. *Entrepreneurship Theory and Practice* 36: 753–79. [CrossRef]
- Collewaert, Veroniek. 2016. Angel–entrepreneur relationships: Demystifying their conflicts. In *Handbook of Research on Business Angels*. Cheltenham: Edward Elgar Publishing.
- Cosenz, Federico, and Guido Noto. 2018. Fostering entrepreneurial learning processes through Dynamic Start-up business model simulators. *The International Journal of Management Education* 16: 468–82. [CrossRef]
- Demyanova, E. A. 2018. Current issues of company evaluation under fintech. *Strategic Decisions and Risk Management* 1: 102–17. [CrossRef]
- Díaz-Santamaría, Carlos, and Jacques Bulchand-Gidumal. 2021. Econometric estimation of the factors that influence startup success. *Sustainability* 13: 2242. [CrossRef]
- Dureux, Bruno. 2016. Cómo valora el Capital Semilla o los Business Angels, una inversión en una Startup. *Revista Española de Capital Riesgo* 2: 5–15.
- Egan-Wyer, C., Sara L. Muhr, and Alf Rehn. 2018. On startups and doublethink—resistance and conformity in negotiating the meaning of entrepreneurship. *Entrepreneurship & Regional Development* 30: 58–80.
- Eisenmann, Thomas R. 2013. Entrepreneurship: A Working Definition. Harvard Business Review. Available online: <https://hbr.org/2013/01/what-is-entrepreneurship> (accessed on 3 August 2022).
- Escartín, Daniel, Àlex Marimon, Albert Rius, Xavier Vilaseca, and Àngel Vives. 2020. Cómo se valora una startup. *Revista de Contabilidad y Dirección* 30: 65–77.
- Forliano, Canio, Paola De Bernardi, and Dorra Yahiaoui. 2021. Entrepreneurial universities: A bibliometric analysis within the business and management domains. *Technological Forecasting and Social Change* 165: 120522. [CrossRef]
- Gordo Molina, Virginia, Francisco Díez Martín, and Cristina Del Castillo Feito. 2022. Legitimacy in entrepreneurship. *Intellectual Structure and Research Trends* 22: 115–28.
- Grant, Maria J., and Andrew Booth. 2009. A typology of reviews: An analysis of 14 review types and associated methodologies. *Health Information & Libraries Journal* 26: 91–108.
- Gross, Bill. 2015. The Single Biggest Reason Why Start-Ups Succeed. [Video]. YouTube. Available online: <https://www.youtube.com/watch?v=bNpx7gpSqBY> (accessed on 3 August 2022).
- Hemmer, Martin, Adam R. Cross, Ying Cheng, Jae-Jin Kim, Florian Kohlbacher, Masahiro Kotosaka, Franz Waldenberger, and Leven J. Zheng. 2019. The distinctiveness and diversity of entrepreneurial ecosystems in China, Japan, and South Korea: An exploratory analysis. *Asian Business & Management* 18: 211–47.
- Herrador-Alcaide, Teresa, and Monserrat Hernandez-Solis. 2019. Empirical Study Regarding Non-Financial Disclosure for Social Conscious Consumption in the Spanish E-Credit Market. *Sustainability* 11: 866. [CrossRef]
- Higgins, Julian P. T., and Sally Green, eds. 2011. *Cochrane Handbook for Systematic Reviews of Interventions Version 5.1.0 [updated March 2011]*. London: The Cochrane collaboration.

- Hudson, John, and Hanan F. Khazragui. 2013. Into the valley of death: Research to innovation. *Drug Discovery Today* 18: 610–13. [CrossRef] [PubMed]
- Hyytinen, Ari, Mika Pajarinen, and Petri Rouvinen. 2015. Does innovativeness reduce startup survival rates? *Journal of Business Venturing* 30: 564–81. [CrossRef]
- Ikhwan, Aulia Dwi, and Raden Aswin Rahadi. 2022. Valuation of digital start-up business: A case study from digital payment solution services company. *Eqien-Jurnal Ekonomi dan Bisnis* 10: 42–56.
- Kiviluoto, Niklas. 2013. Growth as evidence of firm success: Myth or reality? *Entrepreneurship & Regional Development* 25: 569–86.
- Kupp, Martin, Moira Marval, and Peter Borchers. 2017. Corporate accelerators: Fostering innovation while bringing together startups and large firms. *Journal of Business Strategy* 38: 47–53. [CrossRef]
- Kuratko, Donald F., Jeffrey S. Hornsby, and Michael G. Goldsby. 2007. The Relationship of Stakeholder Salience, Organizational Posture, and Entrepreneurial Intensity to Corporate Entrepreneurship. *Journal of Leadership and Organizational Studies* 13: 56–72. [CrossRef]
- Leppänen, Petteri T., Aaron F. McKenny, and Jeremy C. Short. 2019. Qualitative comparative analysis in entrepreneurship: Exploring the approach and noting opportunities for the future. In *Standing on the Shoulders of Giants*. Bradford: Emerald Publishing Limited.
- Lima, Sergio, and Francisco de Assis Carlos Filho. 2019. Bibliometric analysis of scientific production on sharing economy. *Revista de Gestão* 26: 237–55. [CrossRef]
- Lopez Hernandez, Anna K., Anabel Fernandez-Mesa, and Monica Edwards-Schachter. 2018. Team collaboration capabilities as a factor in startup success. *Journal of Technology Management & Innovation* 14: 13–22.
- Mansoori, Yashar, Tomas Karlsson, and Mats Lundqvist. 2019. The influence of the lean startup methodology on entrepreneur-coach relationships in the context of a startup accelerator. *Technovation* 84–85: 37–47. [CrossRef]
- Marullo, Cristina, Elena Casprini, Aalberto Di Minin, and Andrea Piccaluga. 2018. Ready for Take-off: How Open Innovation influences startup success. *Creativity and Innovation Management Journal* 27: 476–88. [CrossRef]
- Mayer-Haug, Katrin, Stuart Read, Jan Brinckmann, Nicholas Dew, and Dietmar Grichnik. 2013. Entrepreneurial talent and venture performance: A meta-analytic investigation of SMEs. *Research Policy* 42: 1251–73. [CrossRef]
- O'Reilly, Charles, and Andrew J. Binns. 2019. The Three Stages of Disruptive Innovation: Idea Generation, Incubation, and Scaling. *California Management Review* 61: 49–71. [CrossRef]
- Obschonka, Martin, Christian Fisch, and Ryan Boyd. 2017. Using digital footprints in entrepreneurship research: A Twitter-based personality analysis of superstar entrepreneurs and managers. *Journal of Business Venturing Insights* 8: 13–23. [CrossRef]
- Oremus, Will. 2013. Google's Big Break. Slate. Available online: <https://slate.com/business/2013/10/googles-big-break-how-bill-gross-goto-com-inspired-the-adwords-business-model.html> (accessed on 3 August 2022).
- Oukes, Tamara, Ariane Raesfeld, and Aard Groen. 2017. Power in a startup's relationships with its established partners: Interactions between structural and behavioural power. *Industrial Marketing Management* 80: 68–83. [CrossRef]
- Pangarkar, Nitin, and Jie Wu. 2013. Alliance formation, partner diversity, and performance of Singapore startups. *Asia Pacific Journal of Management* 30: 791–807. [CrossRef]
- Park, Hun, Jae-Young Yoo, Seon-Hee Moon, Hyoung Yoo, Ho-Shin Lee, Tae-Hoon Kwon, and Hyuk Hahn. 2018. Effect of Technology and Market Dynamism on the Business Performances of SMEs by Supporting Services. *Science, Technology and Society* 24: 144–60. [CrossRef]
- Pasayat, Ajit Kumar, Bhaskar Bhowmick, and Ritik Roy. 2020. Factors Responsible for the Success of a Start-up: A Meta-Analytic Approach. In *IEEE Transactions On Engineering Management*. Piscataway: IEEE.
- Payne, Bill. 2011. Scorecard valuation methodology. *Establishing the Valuation of Prerevenue*. Available online: <https://seedspot.org/wp-content/uploads/2021/02/Scorecard-Valuation-Methodology.pdf> (accessed on 1 August 2022).
- Phan Tan, Luc. 2021. Mapping the social entrepreneurship research: Bibliographic coupling, co-citation and co-word analyses. *Cogent Business & Management* 8: 1896885.
- Picken, Joseph C. 2017. From startup to scalable enterprise: Laying the foundation. *Business Horizons* 60: 587–95. [CrossRef]
- Piñeiro, Fabio, Janaina Mendes Oliveira, Anderson Cougo Cruz, and Tiago Zardin Patias. 2017. Business models on startups: A multicase study. *Revista de Administração da UFSM* 10: 792. [CrossRef]
- Polkinghorne, Donald E. 1995. Narrative configuration in qualitative analysis. *International Journal of Qualitative Studies in Education* 8: 5–23. [CrossRef]
- Prüfer, Jens, and Patricia Prüfer. 2020. Data science for entrepreneurship research: Studying demand dynamics for entrepreneurial skills in the Netherlands. *Small Business Economics* 55: 651–72. [CrossRef]
- Rauch, Andreas. 2020. Opportunities and Threats in Reviewing Entrepreneurship Theory and Practice. *Entrepreneurship Theory and Practice* 44: 847–60. [CrossRef]
- Razmus, Wiktor, and Mariola Laguna. 2018. Dimensions of entrepreneurial success: A multilevel study on stakeholders of micro-enterprises. *Frontiers in Psychology* 9: 791. [CrossRef] [PubMed]
- Reid, Shane W., Aaron H. Anglin, John E. Baur, Jeremy C. Short, and M. Ronald Buckley. 2018. Blazing new trails or opportunity lost? Evaluating research at the intersection of leadership and entrepreneurship. *The Leadership Quarterly* 29: 150–64. [CrossRef]
- Rivera-Kempis, Clariandys, Leobardo Valera, and Miguel A. Sastre-Castillo. 2021. Entrepreneurial Competence: Using Machine Learning to Classify Entrepreneurs. *Sustainability* 13: 8252. [CrossRef]
- Sandelowski, Margarete. 1995. Qualitative analysis: What it is and how to begin. *Research in Nursing & Health* 18: 371–75.

- Santisteban, José, Jorge Inche, and David Mauricio. 2021. Critical success factors throughout the life cycle of information technology start-ups. *Entrepreneurship and Sustainability Issues* 8: 446. [[CrossRef](#)]
- Saura, Jose Ramon, Pedro Palos-Sanchez, and Antonio Grilo. 2019. Detecting indicators for startup business success: Sentiment analysis using text data mining. *Sustainability* 11: 917. [[CrossRef](#)]
- Schou, Pia Schou. 2016. Entrepreneurship Orientation in Policy Making. *The International Journal of Entrepreneurship and Innovation* 17: 43–54.
- Sekliuckiene, Jurgita, Rimgailė Vaitkiene, and Vestina Vainauskiene. 2018. Organisational Learning in Startup Development and International Growth. *Entrepreneurial Business and Economics Review* 6: 125–44. [[CrossRef](#)]
- Serban, Andra, and Ashley J. B. Roberts. 2016. Exploring antecedents and outcomes of shared leadership in a creative context: A mixed-methods approach. *The Leadership Quarterly* 27: 181–99. [[CrossRef](#)]
- Shan, Liu, Zhang Kun, and Shang Jun-ru. 2022. Retrospection and prospect of embeddedness theory—Knowledge map analysis based on bibliometrics. *Journal of Data, Information and Management* 4: 57–70. [[CrossRef](#)]
- Skawińska, Eulalia, and Romuald I. Zalewski. 2020. Success Factors of Startups in the EU—A Comparative Study. *Sustainability* 12: 8200. [[CrossRef](#)]
- Standing, Craig, and Jan Mattsson. 2018. Fake it until you make it: Business model conceptualization in digital entrepreneurship. *Journal of Strategic Marketing* 26: 385–99. [[CrossRef](#)]
- Steffens, Paul, Per Davidsson, and Jason Fitzsimmons. 2009. Performance configurations over time: Implications for growth—and profit-oriented strategies. *Entrepreneurship Theory and Practice* 33: 125–48. [[CrossRef](#)]
- St-Jean, Étienne, and Cynthia Mathieu. 2015. Developing Attitudes Toward an Entrepreneurial Career Through Mentoring: The Mediating Role of Entrepreneurial Self-Efficacy. *Journal of Career Development* 42: 325–38. [[CrossRef](#)]
- Sull, Donald N. 2004. Disciplined Entrepreneurship. *MIT Sloan Management Review* 46: 70–77.
- Tasnim, Rahayu, Salleh Yahya, and Muhammad Nizan Zainuddin. 2014. “I’m Loving It!” What Makes the Successful Entrepreneur Affectively Committed to Entrepreneurial Performance? *Journal of Applied Management and Entrepreneurship* 19: 27. [[CrossRef](#)]
- Ucbasaran, Deniz, Paul Westhead, Mike Wright, and Manuel Flores. 2010. The nature of entrepreneurial experience, business failure and comparative optimism. *Journal of Business Venturing* 25: 541–55. [[CrossRef](#)]
- Urim, Ugochukwu Moses, and David Imhonopi. 2015. Operationalising financing windows for entrepreneurship development in Nigeria: An appraisal. *Research Journal of Finance and Accounting* 6: 58–68.
- van Gelderen, Marco, Roy Thurik, and Niels Bosma. 2005. Success and risk factors in the pre-start-up phase. *Small Business Economics* 24: 365–80. [[CrossRef](#)]
- Vanacker, Tom, Veroniek Collewaert, and Ine Paeleman. 2013. The relationship between slack resources and the performance of entrepreneurial firms: The role of venture capital and angel investors. *Journal of Management Studies* 50: 1070–96. [[CrossRef](#)]
- Yu, Li, and Georgeanne M. Artz. 2019. Does rural entrepreneurship pay? *Small Business Economics* 53: 647–68. [[CrossRef](#)]