A Glimpse into the Worldwide Startup Ecosystems

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Abstract

Since its post-war global spread, entrepreneurial activity has become an important concern of many governments and policymakers. More and more, the economic prosperity of nations has become deeply dependent on entrepreneurs. In order to stimulate startups appearance, there is a need to build an appropriate context. This is why the design, creation and development of startup ecosystems worldwide constitute a key pre-requisite for entrepreneurial success in the age of globalization. The aims of the paper are to define the concept of startup ecosystem and to briefly analyse its evolution at a global level in recent years by using the Global Startup Ecosystem Index. In this line, the author employed a qualitative research method. The findings show that a startup ecosystem constitutes a business agreement among different people and organizations. Also, they demonstrate that the global landscape of startup ecosystems was clearly dominated by the United States of America.

Key words: startup ecosystem, Global Startup Ecosystem Index, United States of America **J.E.L. classification:** L26

1. Introduction

Since its post-war global spread, entrepreneurial activity has become an important concern of many governments and policymakers. Entrepreneurship has begun to occupy an increasing higher position on their political agenda. Therefore, "the transition towards start-up ecosystem-based economic growth" (Sipola *et al*, 2016, p.180) constitutes an essential systemic change for any economy.

More and more, the economic prosperity of nations is deeply dependent on entrepreneurs (Toma, 2013; Catană *et al*, 2020; Rong, 2025). In most cases, startups contributed to job creation, social change, innovation and economic growth (Gries *et al*, 2009; Kane, 2010; Fritsch *et al*, 2013).

In order to stimulate startups appearance, there is a need to build an appropriate context (Ojaghi et al, 2019). This is why the design, creation and development of startup ecosystems worldwide constitute a key pre-requisite for entrepreneurial success in the age of globalization (Cornescu et al, 2004; Toma, 2005). The rapid expansion of new technologies of the Industry 4.0 (Tohanean et al, 2018; Toma et al, 2018) in all activities and domains increasingly requires high-tech and innovative startup ecosystems (Bala Subrahmanya, 2022).

The objectives of the paper are to explain the concept of startup ecosystem and to analyse its evolution at a global level in recent years by using the Global Startup Ecosystem Index (GSEI). The study is structured in the following way: the second part illustrates the literature review. The research methodology is exhibited in the third section of the study. The fourth part deals with the findings. The conclusions are exhibited at the end of the paper.

2. Literature review

Since its appearance, the concept of startup ecosystem has caught the attention of numerous entrepreneurs, businessmen, investors, policymakers and researchers. A startup ecosystem is defined as:

- "a purposeful business arrangement between two or more entities (the members) to create and share in collective value for a common set of customers. Every business ecosystem has participants, and at least one member acts as the orchestrator of the participants. All members in a business ecosystem, whether orchestrators or participants, have their brands present in the value propositions" (Sarafin, 2021, p.1).
- "the result of the environment within which startups and other supporting players operate in" (StartupBlink, 2023a, p.1).
- "a shared pool of resources, generally located within a 60-mile (100-kilometer) radius around a center point in a given region, with a few exceptions based on local reality. It is typically concentrated around a major city and incorporates what would be considered the metropolitan statistical area" (Wolfgang, 2024, p.1).
- "a dynamic network of people and organizations offering resources that contribute to startup success" (Shopify, 2024, p.1).
- "the interconnected network of individuals, organizations, resources, and support structures that collectively contribute to the growth and success of startups in a particular geographical region or industry" (GeeksforGeeks, 2025, p.1).

The above-mentioned definitions allow the identification of several features of a startup ecosystem as follows:

- o There is no universal definition of the concept.
- O A startup ecosystem represents a business agreement among various people (e.g., entrepreneurs, angel investors, start-up mentors) and organizations (e.g., incubators, universities, venture capital companies).
- It is often built around a city.
- o A startup ecosystem is based on multiple human relationships.
- o Entrepreneurs are at the core of a startup ecosystem.
- o A startup ecosystem aims at creating new startup companies and jobs, strengthening the relationships among its members, and developing self-sustaining resources networks.
- o It involves physical and/or virtual environments.
- A startup ecosystem has the capacity to continuously innovate and build enduring business organizations.
- o It is often controlled by both internal (e.g., people diversity, skills) and external (e.g., market disruptions, financial climate) factors.
- o A startup ecosystem may interact and collaborate with other startup ecosystems.

In order to assess the startup ecosystems, researchers and practitioners are using the GSEI which is annually calculated at a global scale by StartupBlink, an innovation economy research platform. Each startup ecosystem obtains a total score which encompasses 3 subscores measuring:

- Quantity- it calculates the activity level of an ecosystem.
- Quality- it evaluates the repercussions and success of the ecosystem activity.
- Business environment- it assesses how helpful the general conditions are for startup growth (StartupBlink, 2025).

On its turn, each subscore contains several components (Table no. 1). A strong startup ecosystem imposes the existence besides the startup(s) of a plethora of supportive organizations that contribute with various resources and networking.

Startup ecosystems are mainly relied on entrepreneurs and their startups. In order to cope with an unstable environment (Toma *et al*, 2015; Marinescu *et al*, 2015a), successful entrepreneurs prove a solid strategic thinking (Toma *et al*, 2016a; Toma *et al*, 2016b; Toma, 2023a), design and implement viable business strategies (Toma *et al*, 2013a; Toma *et al*, 2016c; Toma 2024a) and sustainable business models (Toma *et al*, 2012a; Toma *et al*, 2019), are effective and wise leaders (Marinescu *et al*, 2015b; Toma *et al*, 2020a; Toma *et al*, 2020a; Toma, 2024b), possess an entrepreneurial mindset (Marinescu *et al*, 2017a; Grădinaru *et al*, 2018; Zainea *et al*, 2020; Hudea *et al*, 2021), show creativity (Toma *et al*, 2013b; Marinescu *et al*, 2016; Marinescu *et al*, 2017b) and innovativeness (Toma *et al*, 2016d; Grădinaru *et al*, 2023; Tohănean *et al*, 2024), implement lean (Naruo *et al*, 2007; Marinescu *et al*, 2008; Toma *et al*, 2022), agile (Toma, 2023b) and quality management (Toma, 2006; Toma *et al*, 2009; Toma *et al*, 2012b), are socially responsible (Toma, 2008a; Toma *et al*, 2011; Toma, 2012), and use various techniques and methods such as the

balanced scorecard (Toma *et al*, 2010), Six Sigma (Toma, 2008b), marketing mix (Marinescu *et al*, 2010; Grădinaru *et al*, 2017; Catană *et al*, 2021), customer experience (Toma *et al*, 2021a; Toma *et al*, 2021b) and training programs (Toma, 2008c; Marinescu *et al*, 2013).

Table no. 1. The components of the 3 subscores of the Global Startup Ecosystem Index

Quantity	Quality	Business environment
Number of startups	Total accumulated private sector startup investment	Diversity index
Number of investors	Total accumulated number of startup sector employees	Internet speed
Number of coworking spaces	Number and size of unicorns and exits above US\$1 billion (Bn)	Cost of internet
Number of accelerators	The traction of startups in each ecosystem (including traffic, domain authority, and customer base)	Internet freedom
Number of startup-related meetups	R&D centers of multinational technology companies	R&D investment
	Branches of multinational companies and brands	Availability of various technological services (payment portals, ride-sharing apps, cryptocurrency)
	Total accumulated value of exits with a valuation below US\$1Bn	Level of English proficiency
	Number and size of global startup events and conferences	Passport strength
	Presence and impact of Pantheon members (= hundreds of global companies which have a substantial impact on their startup ecosystem and its brand)	Availability of startup or nomad visas
	Presence and impact of Global Startup Influencers	Corporate tax rate
	Number of startups accepted by top global accelerators per ecosystem	Startup-friendliness of labor laws
	Number and market capitalization of listed companies in technology sectors	Corruption perception index
		Peer-reviewed scientific papers Sovereign debt credit score
		Top universities per location
		Corporate startup activity per location

Source: (StartupBlink, 2025)

3. Research methodology

The author employed a research methodology based on a qualitative method in order to attain the aims of the paper. Firstly, he searched for the most suitable secondary sources of data. Secondly, the author collected the data and classified them. Thirdly, he analyzed numerous articles, books and reports from several electronic databases. Fourthly, he synthesized the data and elaborated the paper.

4. Findings

This section of the paper focuses on the results of the research. In this respect, the author analyzed the evolution of the GSEI in the period 2023-2025. In 2023, the United States of America dominated the top, followed by the United Kingdom and Israel (Table no. 2). The European countries occupied 50% of the ranking.

Table no. 2. The top 10 country ranking according to the GSEI in 2023

Rank	Country	Total score
1	United States of America	198.080
2	United Kingdom	51.218
3	Israel	46.573
4	Canada	34.490
5	Sweden	27.074
6	Singapore	26.571
7	Germany	25.939
8	France	22.916
9	Australia	21.503
10	The Netherlands	21.423

Source: (StartupBlink, 2023b)

One year later, the first three countries of the top remained the same and kept the previous order (Table no. 3). The number of European countries increased, occupying 60% of the hierarchy.

Table no. 3. The top 10 country ranking according to the GSEI in 2024

Rank	Country	Total score
1	United States of America	215.001
2	United Kingdom	55.995
3	Israel	51.557
4	Canada	38.254
5	Singapore	37.736
6	Sweden	27.024
7	Germany	25.830
8	France	24.894
9	The Netherlands	24.462
10	Switzerland	24.081

Source: (StartupBlink, 2024)

In 2025, nothing changed regarding the order of the first three countries of the top (Table no. 4). Also, The European countries occupied 60% of the ranking.

Table no. 4. The top 10 country ranking according to the GSEI in 2025

Rank	Country	Total score
1	United States of America	254.050
2	United Kingdom	70.743
3	Israel	62.167
4	Singapore	54.682
5	Canada	45.438
6	Sweden	35.311
7	Germany	33.159
8	France	32.417
9	Switzerland	31.747
10	The Netherlands	30.872

Source: (StartupBlink, 2025)

The above-mentioned outcomes enable the emphasis of the following issues for the period 2023-2025:

- The United States of America dominated by far the top of the first ten countries according to the GSEI in that period.
- In those three consecutive years, the first three countries of the top (United States of America, United Kingdom, Israel) kept their position.
- That period witnessed the clear predominance of the European countries in the ranking.
- Switzerland succeeded to enter the top of the first ten countries in 2024 while Singapore increased steadily its performance.
- The top 10 country ranking according to the GSEI did not suffer major variations during the period.

5. Conclusions

Since its emergence, the startup ecosystem has become a theme of interest for numerous policymaking, researchers and entrepreneurs. Its important contribution to job creation and economic growth has convinced governments around the world to impose it as a priority on their political agenda.

The paper illustrates the complexity of the startup ecosystem concept, outlining some of its characteristics. It shows that a startup ecosystem constitutes a business agreement among different people and organizations which puts at its core the entrepreneurs. Also, this study demonstrates that in the period 2023-2025 the global landscape of startup ecosystems was clearly dominated by the United States of America. Further research may concentrate on the relationships among startup ecosystems worldwide.

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