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Assessment of the Startup Ecosystem in Algeria based on the Global Startup Ecosystem Index (GSEI): An Analytical Study

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Abstract:

This study aims to assess the effectiveness of current initiatives in developing the startup ecosystem in Algeria, and their impact on startups advancement. Based on the Global Startup Ecosystem Index (GSEI), which ranks startup ecosystems in 1,000 cities and 100 countries, the study has analyzed Algeria's position during the period of (2017-2024).

The study found that Algeria's ranking in this index has shown a significant progress, reflecting a continuous development in the startup ecosystem. However, it has not yet reached the desired level compared to neighboring North African countries. This calls for accelerating the development of the startup ecosystem by improving access to funding, enhancing digital infrastructure, simplifying administrative procedures, as well as benefiting from successful regional and international experiences.

Keywords: Startups, Startup Ecosystem, Global Startup Ecosystem Index, Entrepreneurship, Algeria.

JEL Classification: O43 ،P17، L26

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1. Introduction

The startup ecosystem plays a vital role in fostering innovation, creating jobs, and driving economic growth. As a developing economy, Algeria has been making efforts to enhance its entrepreneurial environment

. The Global Startup Ecosystem Index (GSEI) provides a comprehensive ranking of startup ecosystems worldwide, assessing factors such as market access, investment climate, infrastructure, and government policies.

Over the past decade, Algeria has witnessed the growth of startup ecosystem, driven by various state-led initiatives. While these efforts have contributed to its expansion, the ecosystem remains underdeveloped, lacking the key characteristics of an optimally functioning system. Despite a significant improvement in the Global Startup Ecosystem Index—moving up 44 positions in 2024 compared to its 546th position in 2023—Algeria still ranks 502nd globally, highlighting the need for further progress..

This study will provide a comprehensive analysis of Algeria's startup ecosystem based on its ranking in the Global Startup Ecosystem Index. It will explore key strengths, challenges, and strategic recommendations for fostering a more dynamic and competitive entrepreneurial environment.

Study problem:

In this context, the problem that can be raised is:

How effective are Algeria's current initiatives in fostering the startup ecosystem?

From the above problem, the study addresses the following questions:

- Is Algeria's startup ecosystem suitable for the creation and development of startups?
- To what extent have Algeria's initiatives improved its ranking in the Global Startup Ecosystem Index?
- How can we compare Algeria's startup ecosystem to other countries in the region and globally?

Objectives of the study:

The following are the specific objectives of this research:

- To evaluate the effectiveness of Algeria's current initiatives in developing its startup ecosystem and their impact on the country's global competitiveness.
- To shed light on the strengths and weaknesses of these initiatives.
- To evaluate the influence of Algerian initiatives on startup growth and sustainability.
- To identify the key challenges facing Algerian entrepreneurs.
- To propose some strategic recommendations to enhance Algeria's startup ecosystem and improve its ranking in (GSEI) Index.

Methodology of the study:

To achieve the previous objectives and address the primary problem, the study has adopted the descriptive approach in collecting informations for the theoretical part of the study. The analytical approach was also adopted to analyze Data collected from Global Startup Ecosystem Index (GSEI), and to conduct a comparative analysis of Algeria and other North African countries.

2. Theoretical Framework:

2.1 The concept of startups*:*

The term "startup" has now become part of popular jargon, but it remains ambiguous. In fact, "startup" means "to start," meaning the entity is considered a newly established business. However, in practice, it is primarily associated with an innovative company that continues to attract individuals and investors[1].

According to Patrick Fridenson, being a startup is not about age, size, or industry; rather, it requires meeting four conditions as follows[2] :

- Very high growth potential.
- Use of advanced technology.
- Requires significant funding and access to various forms of investment.
- Ensuring that the market is new, making risk assessment challenging.

As maintained by the Algerian law, a company is considered as a "startup" if it meets the following criteria[3]:

- The company's existence must not exceed eight (8) years.
- Its business model must be based on innovative products, services, business models, or any other innovative concept.
- Its annual revenue must not exceed the amount set by the national committee (set at 500,000,000 Algerian dinars or 50 billion centimes for the year 2021).
- At least 50% of its capital must be held by natural persons, accredited investment funds, or other companies labeled as "startups."
- The company's growth acceleration potential must be significant.
- The number of employees must not exceed 250.

2.2 The difference between startups and micro-enterprises:

The main differences between startups and micro-enterprises can be illustrated in the following table:

Table 1. Key Differences Between Startups and Micro-Enterprises

Characteristics	Startup	Micro-Enterprises
Definition	It is a newly established company that aims to develop and introduce a unique product or service to the market. Startups often focus on innovative and scalable business models with the potential for rapid growth.	They are small businesses that typically operate at the local or regional level. They are characterized by a few employees and relatively low revenues.
Growth potential	It is characterized by its high growth potential, as it aims to rapidly expand its operations and gain a larger market share.	They usually have limited growth potential and may focus on serving a niche market or a specific local community..
Innovation	It is characterized by its focus on innovation, striving to develop new products, services, or business models that offer unique value propositions to customers.	Small businesses may not be centered around innovation, as they often offer goods or services that have already proven successful in the market.
Risks	It is associated with higher risks due to its innovative nature, market uncertainty, and potential competition.	They tend to have lower risks as they often serve a specific local market and provide goods or services with steady demand. They also have a stable customer base.
Scalability	It aims to achieve rapid scalability, which means they have the ability to significantly grow their customer base, revenue, and market presence within a short period.	They are usually less scalable compared to startups. They may expand their operations to some extent, but their growth is constrained by factors such as market size and local demand.

Source: The authors based on**:** Algeria Venture, guide, entrepreneurship:global entrepreneurship week, 2023, pp. 6-10.

2.3 Startup Ecosystem in Algeria:

2.3.1 What is the Startup Ecosystem?

The startup ecosystem consists of individuals and startups at various stages, in addition to the different types of institutions (physical and/or virtual), interacting as a system to create new startups. These organizations can also be classified into universities, funding institutions, support organizations (such as incubators, accelerators, co-working spaces, etc.), research organizations, service providers (such as legal and financial services, etc.), and large corporations. Different organizations typically focus on specific aspects of the ecosystem's functions and/or startups at particular stages of development. The organizations and activities related to the startup ecosystem are the following[4]:

- Business incubators.
- Business accelerators.
- Service providers (consulting, accounting, legal, etc.).
- Event organizers.
- Startup competitions.
- Investor networks.
- Venture capital firms.
- Crowdfunding platforms.
- Other funding providers (loans, grants, etc.).
- Startup blogs and other business media.

2.3.2 Analysis of the Startup Ecosystem in Algeria:

The Startup ecosystem in Algeria can be determined by several key components and initiatives that reflect government efforts and private sector contributions, including:

- **Ministry of Knowledge Economy, Startups and Micro Enterprises**: Upgraded to this designation on September 8, 2022, the ministry is responsible for overseeing the development of the startup ecosystem, providing funding, promoting activities, and fostering cooperation at both the local and regional levels in the fields of the knowledge economy and digital economy[5].
- **The Algerian Startup Fund (ASF)**: Established in October 2020, this private investment institution aims to develop the entrepreneurship and innovation ecosystem in Algeria by offering financial services that meet the needs of startups[6].
- **L'Agence nationale d'appui et de développement de l'entrepreneuriat (Anade)**: Established under Executive Decree No. 20-329 dated November 22, 2020 (as an extension of ANSEJ), it is a public organization with a special status under the supervision of the Minister of Knowledge Economy, Startups, and Micro-Enterprises. The organization is responsible for supporting and promoting entrepreneurship, aiming to assist project holders in creating and expanding micro-enterprises in the production of goods and services, in order to generate wealth and create jobs. This is achieved through the promotion of entrepreneurial thinking and the provision of financial and tax incentives.[7].
- **Algeria Venture**: It is a pioneering state-owned startup accelerator in Algeria, designed to nurture and propel innovative startups to new perspectives. Focused on fostering an entrepreneurial spirit, it provides an ecosystem brimming with modern facilities and creative brainstorming workspaces[8].
- **The Ministry of Higher Education and Scientific Research as a Driver of Innovation**: as a Driver of Innovation, educational institutions in Algeria contribute to the

establishment of startup ecosystem through specialized programs and training courses in entrepreneurship, with the aim to promote entrepreneurial culture within universities. The ministry has launched several initiatives in this regard, starting with the establishment of the National Coordinating Committee for University Innovation and Entrepreneurship, followed by Ministerial Decree No. 1275, issued on September 27, 2022, concerning the "Startup Certificate – Patent Certificate", which was later amended and supplemented by Decree No. 008, dated February 23, 2025. This initiative seeks to create a generation of student entrepreneurs by turning the graduation projects into startups. It should be noted that students under this decree, receive a field training program (FTP) and workshops about Business Model Canvas (BMC), digital marketing, management, in addition to the accounting[9].

In brief, university support structures play an active role in accompanying students, including[10]:

- ✓ University's Business Incubators.
- ✓ Entrepreneurship Development Centers.
- ✓ Technology and Innovation Support Centers.

❖ **Tax Benefits**: Each company awarded the "Startup" label, it benefits from the following tax incentives[11]:

- Exemption from the Professional Activity Tax (TAP), Personal Income Tax (IRG), or Corporate Income Tax (IBS) for four (4) years from the date of obtaining the "Startup" label, with an additional one (1) year in case of renewal.
- Exemption from Value Added Tax (VAT).
- A 5% customs duty on equipment directly involved in implementing their investment projects.

❖ **Financing Mechanisms:** Startups can access to funding through various mechanisms, including[12]:

- Bank loans.
- The Mutual Loan Guarantee Fund for Microloans (ANGEM).
- L'Agence nationale d'appui et de développement de l'entrepreneuriat (Anade).
- The Algerian Startup Fund (ASF).
- Crowdfunding.
- The National Unemployment Insurance Fund (CNAC).

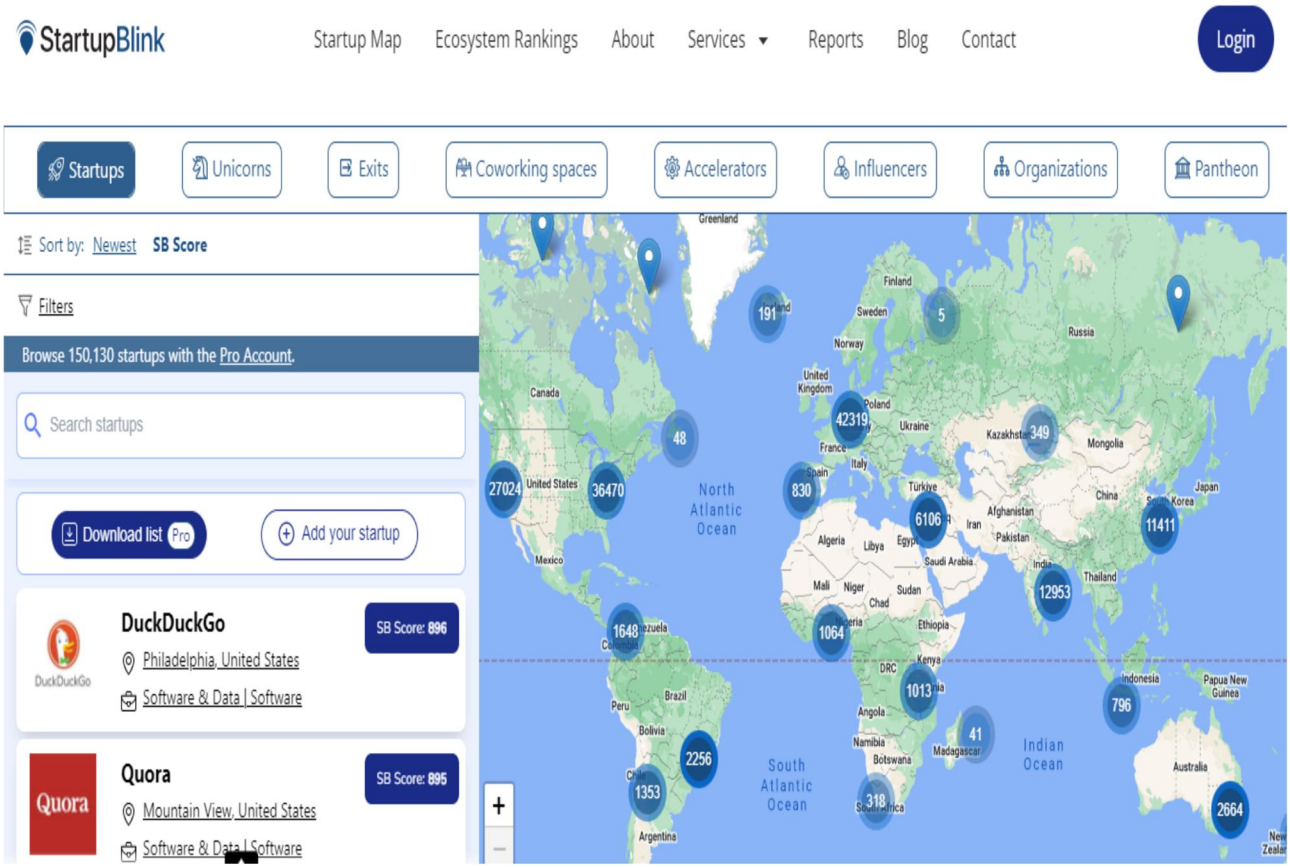
3. Current Status of Algeria's Startup Ecosystem:

3.1 Overview of the Global Startup Ecosystem Index:

The Global Startup Ecosystem Index, published by StartupBlink, aims to rank startup ecosystems in 1,000 cities and 100 countries. This index has been updated annually since 2017. It is based on processing hundreds of thousands of data points through an algorithm that considers dozens of criteria, supplemented by data from various sources and global data partners. Furthermore, it is integrated with the StartupBlink Global Startup Map, which is an interactive map that has been updated since 2013[13].

This map provides a comprehensive sample of stakeholders in each startup ecosystem, helping to identify the top startups in 1,000 cities and 100 countries. The database is continuously expanding, currently featuring over 120,000 startups. Users can browse startups by region, country, and city, and filter results based on 12 main industries and over 100 sub-industries[14].

Fig.1. StartupBlink Global Startup Ecosystem Map



Source: StartupBlink, Global Startup Map and Startup Rankings, 2025, accessed on: 02/26/2025, the link : https://www.startupblink.com/startups?utm_source=report&utm_medium=report

3.2 Algeria's ranking and performance in the latest index:

3.2.1 Algiers, the Algerian capital: ranking in the Global Startup Ecosystem Index

In recent years, Algeria's startup ecosystem has gained increasing attention as the country strives to enhance its entrepreneurial environment through legal reforms, financial support, and tax incentives. In 2024, Algeria is ranked 115th globally, dropping one spot than its 2023 ranking.

This trend is reflected in Algeria and its cities' rankings within the Global Startup Ecosystem Index, which assesses the development of startup ecosystems in various countries and cities worldwide. The index highlights both the challenges and opportunities for Algerian startups, providing insight into their global positioning and the efforts made to enhance their competitiveness.

Notably, Algeria has only one city listed among the top 1,000 cities and is considered as one of the best countries in North Africa for launching startups. (Table 2) below presents an overview of Algiers' ranking in the Global Startup Ecosystem Index from 2017 to 2024.

Table 2. Algiers' Ranking in the Global Startup Ecosystem Index (2017–2024)

years	2017	2018	2019	2020	2021	2022	2023	2024
ranking	-	-	-	-	984	771	546	502
Total Score	-	-	-	-	-	0.299	0.423	0.489
Rank Change	-	-	-	-	-	+213	+225	+44

(-) No data available for non-classification in that period

Source: the authors based on**:** StartupBlink ،Global Startup Ecosystem Index, statistics (2017-2024), accessed on: 01/03/2025, the link: https://www.startupblink.com**.**

Between 2017 and 2020, limited specific information is available about Algiers' global ranking; however, it was not among the top-ranked cities during this period. In 2021, Algiers was ranked 984th globally in the Global Startup Ecosystem Index. The city made remarkable progress in 2022, rising to 771st place—which is an impressive leap of 213 positions, the largest annual improvement recorded among all studied ecosystems.

This upward trend continued in 2023, with climbing 225 places and ranking the 546th position. By 2024, the city has advanced to 502nd place, reflecting steady growth and a continuous development in its startup ecosystem.

3.2.2 Algeria's Startup Ecosystem Health Check

The Global Startup Ecosystem Index evaluates startup ecosystems based on various parameters, including the Quantity Score, Quality Score, and Business Score[15]. The health check tables allow you to assess Algeria's performance in each of the parameters that are part of StartupBlink's ranking algorithm. The performance of these parameters in 2024 is illustrated in the table below:

Table 3. Algeria's Ranking in Key Startup Ecosystem Indicators for 2024

	Quantity Score	Quality Score	Business Score	Total
2024 rank	118	97	110	115

Source: the authors based on**:** startupblink, The Startup Ecosystem of Algiers, 2025, accessed on: 03/01/2025, link: https://www.startupblink.com/startup-ecosystem/algiers-dz?page=1.

The assessment shows that Algeria's startup ecosystem still faces challenges, as the country ranked 118th in the Quantity Score, indicating a limited number of startups compared to other countries. In terms of the Quality Score, Algeria ranked 97th, reflecting the presence of some high-quality startups, but there is still a need to enhance innovation and attract more investments. For the Business Score, which measures the entrepreneurial environment and the availability of support and facilities, Algeria ranked 110th, highlighting regulatory and financial obstacles that hinder startup growth. Overall, Algeria ranked 115th globally, emphasizing the need to improve the business environment and stimulate entrepreneurship.

3.2.3 Startup Funding in Algeria (2017 – 2023)

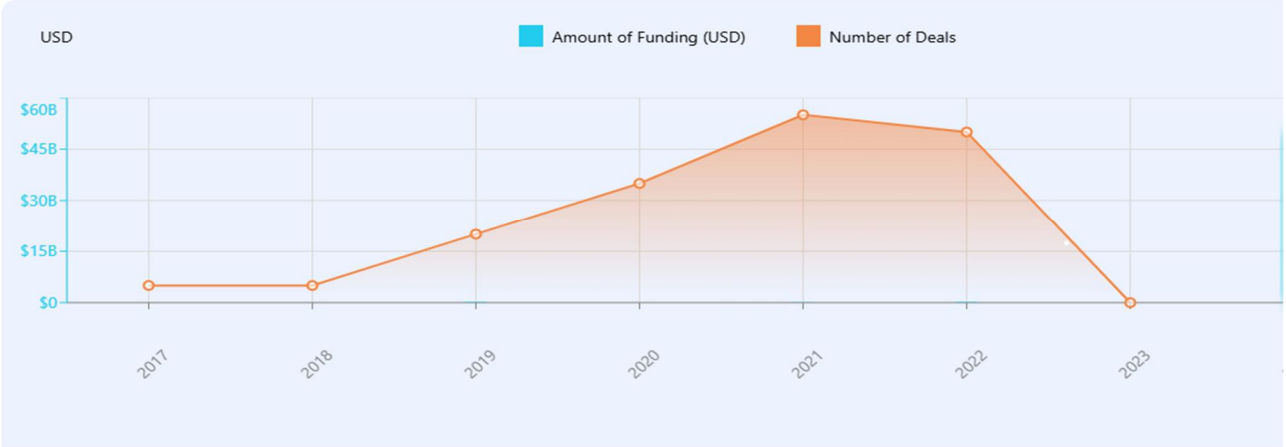
The startup sector in Algeria has witnessed remarkable developments in recent years, with funding levels experiencing significant fluctuations, reflecting phases of growth, challenges, and investment opportunities from 2017 to 2023. The following table presents startup funding in Algeria during this period:

Table 4. Startup Funding in Algeria for the period (2017 – 2023)

years	2017	2018	2019	2020	2021	2022	2023
Amount of Funding (USD)	60k	1.7M	154.16M	767.29k	68.09M	150.65M	0
Number of Deals	1	1	4	7	11	10	0

Source: the authors based on**:** startupblink, The Startup Ecosystem of Algiers, 2025, accessed on: 03 01, 2025, link: https://www.startupblink.com/startup-ecosystem/algiers-dz?page=1.

Fig.2. Startup Funding in Algeria for the period (2017 – 2023)



Source: startupblink, The Startup Ecosystem of Algiers, 2025, accessed on: 03 01, 2025, link: https://www.startupblink.com/startup-ecosystem/algiers-dz?page=1.

Between 2017 and 2022, the market experienced a significant transformation, moving from an early-stage phase to rapid growth, followed by fluctuations and eventual recovery. In 2017 and 2018, funding was limited, but it surged dramatically in 2019 to $154.16 million, accompanied by an increase in the number of deals, reflecting the entry of major investments. However, funding dropped sharply in 2020 to less than $1 million despite a rise in the number of deals, likely due to the impact of the COVID-19 pandemic . In 2021 and 2022, the market rebounded strongly, with funding increasing to $68.09 million and then $150.65 million, alongside a growing number of deals.

Also, during the period of 2022 and 2023, startup funding in Algeria dropped by 100%, and the number of deals also declined by 100% during the same period. Since 2017, total startup funding in Algeria has exceeded $375.42 million.

3.2.4 Leading Startups in Algiers

Algiers, the capital of Algeria, hosts a vibrant startup ecosystem with several leading startups across various sectors. The table below presents some of the top startups in Algeria, many of which are based in Algiers or have significant operations there:

Table 5. Top Startups in Algiers in 2024

Startup Name	Description	National Ranking	Regional Ranking	Global Ranking	Score
Yassir	A convenient transportation service that allows users to book drivers via a smartphone app for safe and reliable travel. Total Funding :$180.3M Employee Range: 501-1000	1 (↑0)	1 (↑0)	580th (↓313)	626
Temtem	Offers transportation services at competitive prices with a focus on safety. Total Funding :$5.7M Employee Range: 11-50	2 (↑0)	222 (↓10)	59,083rd (↓ 2598)	278
Fatoura by Brainiac	Provides comprehensive billing, taxation, and SaaS solutions, including efficient billing management, management software, invoice tracking, and	3rd (↑ 0)	241st (↑47)	65,510th (↑ 10199)	265

	robust product and customer databases. Total Funding : $70K Employee Range: 11-50				
Zawwali	An e-commerce platform based in Algeria, specializing in a curated selection of tech and fashion brands. Total Funding : $100K Employee Range: 1-10	4th (↑6)	334th (↑82)	86,757th (↑11593)	218
Moufid BI	Offers comprehensive solutions in accounting, financial analysis, business valuation, and tax consolidation, ensuring accuracy and compliance. Total Funding : $130K Employee Range: 1-10	5th (↑4)	351st (↑45)	88,642nd (↑6374)	214

- Regional Ranking (Northern Africa).

Source: the authors based on**:** (startupblink, The Startup Ecosystem of Algiers, 2025, Consulté le 03 01, 2025, sur: https://www.startupblink.com/startup-ecosystem/algiers-dz?page=1).

The data indicates that Yassir is the strongest startup, maintaining its first-place national ranking despite a decline in global ranking (-313) and a regional drop. In contrast, although Temtem holds the second position nationally, it has also declined globally (-2,598), reflecting challenges in expansion. Fatoura by Brainiac has improved regionally (+47) and globally (+10,199), showing notable growth despite limited funding. Zawwli recorded the largest global (+11,593) and regional (+82) jumps, highlighting strong potential in e-commerce. Moufid BI also showed steady progress globally (+6,374) and regionally (+45). Overall, startups need to enhance their investment strategies and innovation efforts to continue improving their rankings.

3.3 Comparison of Algeria's Startup Ecosystem with Other Countries:

Algeria's startup ecosystem has made significant strides in recent years, but it remains in its developmental stages compared to more established ecosystems in the region and globally. Below is a comparative analysis of Algeria's startup ecosystem with other countries.

3.3.1 Global and Arab world ranking of countries in the Global Startup Ecosystem Index

Startup ecosystems around the world are witnessing increasing competition, as countries strive to enhance their innovation capabilities, attract investments, and provide a suitable environment for the growth of entrepreneurial projects. The ranking of countries in this field reflects the development of their systems supporting entrepreneurs and their readiness to keep pace with economic and technological transformations.

Globally, some countries hold leading positions due to their entrepreneurship-friendly policies, while others face challenges that hinder their progress. In the Arab world, rankings vary based on multiple factors, such as access to funding, technological infrastructure, and ease of doing business.

Accordingly, the table below presents the ranking of countries globally and in the Arab world for the year 2024, highlighting the changes in rankings compared to previous years.

Table 5. Global Startup Ecosystem Index: Top Countries 2024

Country	Global Rank	Rank Change (from 2023)	Total Score	Country	Arab World Rank	Rank Change (from 2023)	Total Score
United States	1	-	*215.001*	***United Arab Emirates***	1	+5	*12.393*
United Kingdom	2	-	*55.995*	**Saudi Arabia**	2	+1	1.968
Canada	*4*	-	*38.254*	***Egypt***	3	+1	1.748
Singapore	*5*	1+	*37.736*	***Bahrain***	4	-7	1.670
Sweden	*6*	1-	*27.024*	***Jordan***	5	-	1.365
Germany	*7*	-	*25.830*	**Lebanon**	6	+2	0.956
France	*8*	-	*24.894*	**Qatar**	7	+11	0.849
The Netherlands	*9*	1+	24.462	**Tunisia**	8	+1	0.682
Switzerland	*10*	*1+*	*24.081*	**Kuwait**	9	+3	0.617
Australia	*11*	*2-*	*23.115*	**Morocco**	10	+1	0.558

***** The country ranked third was removed from the top 10 ranking table

Source: the authors based on**:** StartupBlink, Global Startup Ecosystem Index 2024, repport, PP51-52.

The table presents the ranking of the top countries in the Global Startup Ecosystem Index for 2024. It reflects the varying growth of startup ecosystems worldwide and in the Arab region, highlighting the progress of some countries in enhancing their investment environments and entrepreneurship sectors.

Globally, the United States led the list by a significant margin in 2024, followed by the United Kingdom. Notable changes included Singapore, the Netherlands, and Switzerland, each moving up one position, while Sweden dropped in the rankings. Australia, meanwhile, dropped out of the global top 10 and ranked 11th.

In the Arab world, the United Arab Emirates ranks first, making a remarkable jump of five positions, followed by Saudi Arabia and Egypt. Qatar recorded the most significant improvement, rising by 11 positions, whereas Bahrain saw a notable decline.

3.3.2 Comparison with Countries in the Northern Africa Regional Ranking

The startup ecosystems in the Maghreb countries are experiencing continuous growth, with Tunisia, Morocco, and Algeria striving to enhance their entrepreneurial environments and attract investments. The levels of progress vary among these countries in terms of global and regional rankings, reflecting differences in government support, infrastructure, and the number of active cities in this sector. This diversity contributes to shaping a competitive entrepreneurial landscape, opening new opportunities for innovation and growth in the region. The following table shows Algeria's ranking in the Global Startup Ecosystem Index compared to Tunisia and Morocco.

Table 5. Algeria's Ranking Compared to Tunisia and Morocco in the Global Startup Ecosystem Index 2024

Country	Global Rank (2024)	Regional Ranking	Number of cities ranked	Rank Change (from 2023)	Total Score
Tunisia	90	2	1	+1	0.682
Morocco	92	3	3	+1	0.558
Algeria	115	4	1	-1	Na

Source the authors based on**:** StartupBlink, Global Startup Ecosystem Index 2024, repport, PP52,281,285, 360.

The table presents the ranking of Algeria, Tunisia, and Morocco in the Global Startup Ecosystem Index for 2024. Tunisia leads regionally among the three countries, ranking 90th globally and 2nd regionally, with one ranked city and an improvement of one position compared to 2023, achieving a total score of 0.682. Morocco follows in 92nd place globally and 3rd regionally, with three ranked cities and a similar one-position improvement (+1), scoring 0.558. Algeria ranks 115th globally and 4th regionally, with a decline of one position compared to 2023 and only one ranked city. These results highlight Tunisia and Morocco's stronger support for startup ecosystems compared to Algeria, which has experienced a decline in its ranking.

The ranking of cities classified within the Startup Ecosystem Index for 2024 in Algeria, Tunisia, and Morocco can be clarified through the table below, which reflects their performance in supporting entrepreneurship and developing the startup environment. This classification is based on several criteria, such as the number of startups, the quality of the business environment, and the level of government and investment support. The table also shows the improvement or decline in the ranking of these cities compared to the previous year, helping to understand current trends in the startup ecosystem and identify challenges and opportunities to enhance growth and innovation in the region.

Table 6. Ranking of Maghreb Cities in the 2024 Startup Ecosystem Index

Ciy	Country	Global Rank (2024)	Rank Change (from 2023)	Total Score
Tunis	Tunisia	342	+18	1.064
Casablanca	Morocco	359	+22	0.990
Algiers	Algeria	502	+44	0.489
Rabat	Morocco	818	+226	0.177
Agadir	Morocco	886	−95	0.152

Source: the authors based on**:** *StartupBlink, Global Startup Ecosystem Index 2024, repport,* PP281, 285, 360.

According to the previous table, the ranking of some Maghreb cities within the Startup Ecosystem Index for 2024 reflects their varying performance in supporting entrepreneurship. Tunis ranked 342nd globally, followed by Casablanca at 359th, both showing slight improvements compared to 2023 (+18 and +22, respectively), indicating a stable entrepreneurial environment. On the other hand, Algiers advanced 44 places to rank 502nd, reflecting significant progress in its startup ecosystem. Rabat experienced the most notable leap, climbing 226 places to rank 818th, signaling an improvement in its entrepreneurial landscape. Conversely, Agadir dropped 95 places to rank 886th, highlighting challenges that negatively impact its startup ecosystem.

3.4 Challenges and Requirements for Improving Algeria's Startup Ecosystem

It is important to emphasize that improving the startup ecosystem in Algeria requires addressing a range of challenges and meeting essential requirements to ensure its growth and sustainability. Based on Algeria's economic and social reality, these challenges and requirements can be summarized as follows:

❖ **Challenges Facing the Startup Ecosystem in Algeria**

The most significant obstacles and challenges hindering the growth and development of startups in Algeria are:

1. **Bureaucratic Hurdles**: Administrative and regulatory barriers hinder the establishment and operation of startups. Despite government efforts to reduce bureaucracy, these obstacles remain[16].
2. **Limited Access to Funding**: Startups struggle to secure financing due to the scarcity of venture capital and the risk aversion of banks, which restricts growth and innovation. Additionally, the underdeveloped venture capital industry poses a significant challenge, as there are not enough investors willing to take risks on innovative projects[17].
3. **Infrastructure and Technology**: Inadequate infrastructure is a major challenge, as startups often rely on modern technology. This results in a lack of digital infrastructure, such as high-speed internet and data centers. Moreover, limited access to advanced technology further hinders entrepreneurship and digital innovation[18].
4. **Cultural and Educational Factors**: Strengthening the entrepreneurial culture and developing relevant skills are crucial for fostering a thriving startup ecosystem[19].

❖ **Requirements for Improvement :**

1. **Regulatory Reforms**: Improving the business climate by reducing bureaucracy, enacting incentive laws such as tax exemptions, and increasing transparency in government dealings can attract more investors and entrepreneurs[20].
2. **Financial Support Mechanisms**: Establishing strong financing options, such as venture capital funds through public-private partnerships and government-backed loans, can help startups scale[21].
3. **Infrastructure Development**: Investing in technological infrastructure, such as the high-speed internet and coworking spaces, can support business growth[22].
4. **Promoting Entrepreneurial Culture**: Encouraging entrepreneurship through education and training programs can help build a more dynamic startup ecosystem[23].
5. **Innovation and Technology Integration**: Leveraging technology and innovation can drive growth across various industries, particularly in sectors like information and communication technology. Additionally, establishing technology zones and innovation centers in different regions can support tech-based startups[24].
6. **Government and Institutional Support**: Strengthening institutions such as incubators, accelerators, and innovation centers can provide startups with the necessary resources and mentorship. Moreover, promoting collaboration between universities and incubators can bridge the gap between academia and practical application[25].

5. Results analysis:

By analyzing the startup ecosystem in Algeria based on the Global Startup Ecosystem Index, the following key findings can be presented:

- The startup ecosystem in Algeria is gradually developing, driven by a series of government reforms. However, it still faces structural challenges that hinder its growth, particularly in terms of access to funding and digital infrastructure. According to the Global Entrepreneurship Monitor (GEM, 2024) report[26], fear of failure has become an increasing barrier for entrepreneurs worldwide, with 49% of respondents stating they did

not start their businesses due to this fear, compared to 44% in 2019. This trend is also reflected in Algeria's entrepreneurial landscape. Moreover, many entrepreneurs, including those in Algeria, have expressed hesitation regarding the integration of artificial intelligence into their business strategies over the next few years. This highlights the need for awareness campaigns and training programs to educate entrepreneurs on the potential of AI to support innovation and enhance competitiveness.

- There are increasing efforts to promote entrepreneurship in Algeria through government policies and support programs. However, the regulatory environment still requires further improvement.
- Algiers may be relatively behind in rankings compared to important cities in the region, such as Casablanca and Tunis, due to weak funding, a limited number of investors, and a lack of structural support. Nevertheless, there is a noticeable growth in the number of startups and increasing interest in the digital and technological sectors.
- Startup funding sources remain limited, with most entrepreneurs relying on self-financing or limited government support. Compared to neighboring countries such as Morocco and Tunisia, Algeria has yet to attract significant investments from venture capital funds or international investors.
- Some prominent startups have emerged in fields such as financial technology, e-commerce, and digital services, indicating significant growth potential.
- Both Morocco and Tunisia rank ahead of Algeria due to their supportive environment for entrepreneurs, better infrastructure, and openness to foreign investments. Morocco benefits from the presence of large investment funds such as the Innov Invest Fund, which was established in collaboration with entities like the World Bank and the European Union. This has improved access to financing, strengthening Morocco's position as a regional innovation hub. Meanwhile, Tunisia has a strong network of incubators and accelerators such as Connect'Innov. The Tunisian startup ecosystem benefits not only from government and international support but also from private sector contributions. Organizations like Tunisian Startups, an NGO founded by entrepreneurs to advocate for and unify the startup community, play a crucial role. Therefore, Algeria needs to improve its business environment, ease administrative restrictions, and increase funding opportunities to attract more entrepreneurs and international investors.

5. Conclusion:

The startup ecosystem in Algeria is showing significant progress in promoting innovation and entrepreneurship. Government efforts to develop a supportive environment for startups are considered as a positive step toward diversifying of the national economy and reducing reliance on traditional resources. However, there are challenges that require a collaboration between the public and private sectors, including improving access to financing, enhancing digital infrastructure, and simplifying administrative procedures. By leveraging successful regional and international experiences, Algeria can accelerate the development of its startup ecosystem, contributing to job creation and sustainable economic growth.

To address these challenges, the following recommendations are proposed to promote the entrepreneurial ecosystem of startups:

- Simplifying legal and administrative procedures by digitizing the process of business creation through unified platforms and implementing a "one-stop shop" system, along with revising regulations to reduce bureaucracy.
- Enhancing access to funding by establishing venture capital funds and providing loan guarantees, in addition to supporting angel investor networks to facilitate startup financing.
- Improving digital infrastructure by expanding internet coverage and offering technical

solutions and cloud services that support innovation.

- Expanding incubators and innovation centers across all regions, especially in inland areas, while supporting incubated projects and organizing local entrepreneurship events to uncover talent and innovative ideas.
- Promoting an entrepreneurial culture by integrating it into educational curricula from early stages, and organizing training programs and competitions to encourage initiative and innovation among youth.
- Encouraging the international openness of Algerian startups by establishing partnerships with foreign incubators and accelerators, participating in global events, and organizing exchange programs to gain entrepreneurial experience.
- Promoting sustainable startups by offering tax incentives and supporting innovation in green technologies and clean energy, contributing to the development of an environmentally conscious entrepreneurial ecosystem.
- Strengthening public-private cooperation through partnerships between government entities, private companies, and academic institutions to support innovation and foster a favorable environment for startup growth.

6. References:

[1] - DJEKIDEL Yahia; DOUA Mohammed, MERRAD Rais. ,La startup en Algérie : Caractéristiques et Obligations. Revue d'excellence pour la recherche en économie et en gestion, 05(01), 2021, p 419.

[2] - Arab fatima Zohra , Seddiki Khadra, The role of the state in supporting the start-up in the new Algeria. Annals of Bechar University in Economic Sciences, 08(01), 2021, p36.

3 - Algeria Venture , entrepreneurship:global entrepreneurship week, guide, 2023, p 15.

4 -startupcommons, What Is Startup Ecosystem?,2016, Consulté le 02 24, 2025, sur startupcommons: https://www.startupcommons.org/what-is-startup-ecosystem.htm.

5 - Bensaoucha Yazid, bachiri abdelaalim, Brachene Imed Eddine , Determinants of the startup ecosystem in Algeria - an analytical study 2018-2024. Journal of business and finance economy, 09(02),2024, p261.

[6] - Algerian Startup Fund (ASF)), *Votre partenaire pour Réussir*,2021, Consulté le 02 28, 2025, sur: https://asf.dz/

[7] - بودرة فاطمة، فعالية الوكالة الوطنية لدعم وتنمية المقاولاتية Anade في بعث الروح في المؤسسات المتعثرة في الجزائر (دراسة تحليلية)، المقريزي للدراسات الاقتصادية والمالية، المجلد 06، العـدد01، 2022، ص 118 .

[8] - Algeria Venture, (2024), *About Algeria Venture*. Consulté le 02 28, 2025, sur: https://www.aventure.dz.

[9] - وزارة التعليم العالي والبحث العلمي، قرار رقم 008 المعدل والمتمم للقرار رقم 1275 كيفيات إعداد مشروع مذكرة تخرج للحصول على شهادة جامعية - مؤسسة ناشئة من قبل طلبة مؤسسات التعليم العالي الصادر في23 فيفري 2025 ، الجزائر، ص 3. تاريخ الاطلاع : 2025/02/23.

[10] - نفس المرجع، ص 4.

[11] - Algeria Venture , guide, op.cit, p 16.

[12] - Ibid, p 22.

[13] - *StartupBlink, Global Startup Ecosystem Index(30,May,2024), repport*, P7, Retrieved on 02 26, 2025 .

[14] - StartupBlink, *Global Startup Map and Startup Rankings*, 2025, Retrieved on 02 26, 2025, sur : https://www.startupblink.com/startups?utm_source=report&utm_medium=report

[15] - startupblink, The Startup Ecosystem of Algiers, 2025, Retrieved on 03 01, 2025, sur: https://www.startupblink.com/startup-ecosystem/algiers-dz?page=1

[16] - Abdelkader Baaziz, Towards a new paradigm of "coopetitiveness" in emerging countries: Case of the Algerian Entrepreneurial Ecosystems, International Journal of Innovation,7(1) ,2018, pp73-74. http://dx.doi.org/10.5585/iji.v7i1.354.

[17] - The Hague Academy, Fostering an Entrepreneurial Ecosystem in Algeria, 2025, Retrieved on 03 01, 2025, from :https://thehagueacademy.com/news/fostering-an-entrepreneurial-ecosystem-in-algeria/

[18] - mahfoud belkis, The reality and challenges of start-up in Algeria- a case study of «khidmaTech » and «Nahla Dile,The Journal of Legal and Economic Studies ,7(1),2024, p65

[19] - The Hague Academy,op.cit.

[20] - Investing in Africa (AFSIC), Understanding the Business Climate in Algeria - AFSIC 2025, Retrieved on 13 02, 2025, from : https://www.afsic.net/understanding-the-business-climate-in-algeria-2/.

[21] - Derbal Soumeia et al,The reality of startup institutions in Algeria.International Journal of Economic Perspectives,18(5), 2014, p282.

[22] - Investing in Africa (AFSIC), op.cit.

[23] - The Hague Academy,op.cit.

[24] - Investing in Africa (AFSIC), op.cit.

[25] - Derbal Soumeia et al, op.cit.

[26] - Global Entrepreneurship Monitor , Global Entrepreneurship Monitor 2024/2025 Global Report: Entrepreneurship Reality Check, Published by the Global Entrepreneurship Research Association (GERA),United Kingdom,2025,P.P12-16. Retrieved on 19, 04, 2025.