

# Global Startup Ecosysten ndex

crunchbase



















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# A Word from StartupBlink CEO



**2022** is the year of global startup ecosystem uncertainty. And that's not necessarily bad, as it historically brings new opportunities and potential exponential growth in sectors and technologies.

First and foremost, our vision of an integrated and global startup ecosystem where hundreds of countries and thousands of cities are all playing on the same global playfield is not materializing. Some Startup Ecosystems are now fragmenting.

Some aspects of this trend are positive. Emerging regional hubs such as Singapore and Dubai are building

technologies catering to their geographies. People around the world are now using solutions that were customized specifically for their tastes and local preferences, that were built by local entrepreneurs, instead of patronizing a handful of powerful global corporations. We love this.

However, we can't ignore the negative implications of this separation. A few notable countries, such as China and Russia, have made a conscious decision to build closed-wall ecosystems decoupled from the global internet and digital economy. This usually happens due to geopolitical reasons and results in complete separation between startup ecosystems. Our ability to connect to each other globally, share information, and develop global solutions is harmed by this trend. The internet used to be a magical place where we could meet people from all over the world. It is now a place where we mostly meet people from our geopolitical block. Those we don't meet cannot become our friends.

We believe countries that decide to isolate their startup ecosystems from the world will not thrive in the long term. If currently the cycle is leaning towards increased fragmentation, it will shift at some point, and those who have stayed connected will be in a much better position.

Countries, and each of us as digital citizens, that choose to stay connected to an open version of the Internet should also be careful not to isolate ourselves in a closed digital network. Human psychology encourages us to surround ourselves with like-minded people. Our political affiliation, place of residence, and financial status will vastly determine our digital tribes and identity. Let's keep an open mind.

Beyond the psychology of ecosystems, there are some economic elements which currently challenge the growth of tech ecosystems around the world. Inflation, tech sector wage increases, company devaluations, and increasing interest rates will all challenge short term economic growth and make it harder to raise capital. For founders, it could mean a return to beautiful origins; the self funded bootstrapped path may become a necessity again.

In any case, the opportunities are immense as humanity transitions into a digital reality that, at times, seems more powerful and relevant than our physical identity. But make no mistake, your physical presence in the startup ecosystem is still a critical ingredient in your success. Use the post pandemic new normal to go out and connect with your fellow entrepreneurs (if your government allows). It just takes one human connection to completely change the trajectory of your business for the better. Zoom and the cloud are not enough.

To founders, our recommendation is always the same:

Choose your startup ecosystem wisely as it greatly affects your chances of success. Where you are matters.

You will never realize the price of being in the wrong ecosystem, since missed opportunities are hidden, but abundant if you pick the right place. If you are in the wrong ecosystem, leave it or lead it. Do not stay passively isolated in a place that is underperforming.

As for government ecosystem developers, our message stays the same as well: Working with dozens of you as our ecosystem partners has inspired us. Most of you have played your cards wisely and helped build outstanding startup ecosystems that are the engine of your present and future economic growth. However, some governments are much more timid, quietly watching the tragic brain drain of their most ambitious and talented citizens. The consequences to the well being of these communities and future economies are vast. Take action to build your startup economies and leverage your unique advantages. It's never too late to start, so start now.

On a personal note, it is such a joy to work on a project that allows us to produce unique insights on the current state and momentum of thousands of startup ecosystems. There is no longer any need for permission and association from gatekeepers to make an impact in the world. May it stay this way.

This report is dedicated to all who have decided to build something new and needed in the world. You are the true champions of economic development and human progress. May you succeed, or at least have fun trying.

Eli David CEO, StartupBlink



# Introducing the Global Startup Ecosystem Index

The Global Startup Ecosystem Index by StartupBlink has been updated annually since 2017 and is the world's most comprehensive startup ecosystem ranking of:

1000 cities and 100 countries

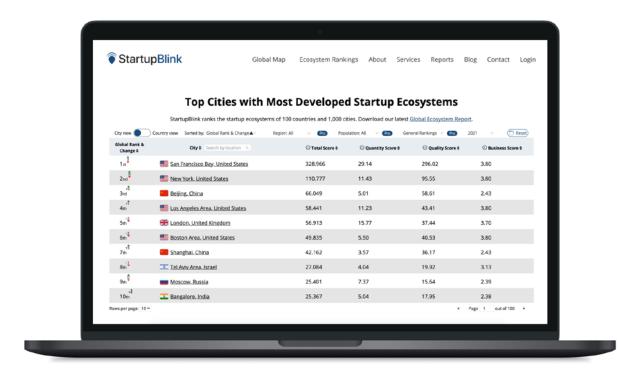
The Global Startup Ecosystem Index is built using hundreds of thousands of data points processed by an algorithm which takes into account several dozens of parameters, as explained in the Methodology section. In addition to the supplementation of data from various global data partners, our Ecosystem Index is integrated with the interactive and crowdsourced <a href="StartupBlink Global Startup Ecosystem Map">StartupBlink Global Startup Ecosystem Map</a>. This map, updated since 2013, provides a strong sample of the stakeholders in each startup ecosystem. Our platform now provides interactive startup ecosystem dashboards for all ranked cities and countries.



The Index is used annually by hundreds of thousands startup founders, startup ecosystem developers, corporations, and other stakeholders to support critical decisions on policy making, strategy, relocation, and investment. StartupBlink is using the Index and its vast underlying data sets in various analyses and policy advising projects related to <u>startup</u> ecosystem development for dozens of governments and international organizations.

There are multiple sources of data used to build the index. Firstly, the global map is crowdsourced with hundreds of thousands of startup related entities. StartupBlink also works closely with numerous global data partners, such as Crunchbase, SEMrush, Statista, and Meetup to supplement data from these unique sources. In addition, we work with approximately 100 Ecosystem partners, most of which are government agencies, and receive data about their ecosystems. You can join them at no cost <a href="here">here</a>. Finally, substantial data is received from the deployment of white-labeled global Startup Industry Maps, using StartupBlink technology, such as <a href="here">The Global Fintech Map</a> and the <a href="here">COVID-19 Resilience</a> Innovation Map. There are also dozens of specific location ecosystem portals (Example here for the <a href="here">city of Bogota</a>), helping us to collect additional data.

Interactive ranking tables with all ecosystems, including the 1000 top-ranked cities worldwide, are available in the section below the <u>StartupBlink Global Map</u>.



This report's structure remains the same as last year. Initially, we present the methodology, key insights, and supply analysis at the regional level where power shifts between regions are revealed. We then introduce the startup ecosystem of each of the 100 ranked countries and analyze the rankings of their cities. This section is followed by alternative rankings of startup ecosystems by industries and subscores, as well as additional analysis on topics such as Ecosystem Variety and rankings by industries, like Ecommerce & Retail or Fintech. We conclude with a few startup ecosystem case studies of our partnered cities.

This year's report continues our tradition of introducing new analyses that we believe you, our readers, will be excited about.

First, our regional analysis section, which analyzes power shifts among and within geographies, has been extended with insights on how startup funding is distributed between regions, revealing some very interesting dynamics.

Second, while the Index only includes the world's 100 best performing countries, this year we added a section called Contender Ecosystems where we shed the light on countries that haven't made it to the top 100 list, but where we observe a good level of startup activity, such that we believe that these countries are candidates for entering the Index in the next year or two if they continue investing in and successfully improving the results of their ecosystems.

Third, we added an alternative ranking of countries by their absolute power. For reasons that are explained in the Methodology section, our country scores (but not city scores) take into account population size, ensuring that performance is assessed based on achieved results in relation to human capital. The alternative country ranking by absolute power does not take population size into account, and ranks the world's 20 top countries based on their results without correcting for population size. Obviously, you'd expect that large countries have a big advantage compared to small ones. Read our analysis to reveal which smaller countries belong to the world's top even without adjusting for their population size.

The results of the Index will always remain free for the general public. Raw and processed data of hundreds of ecosystems in excel format, customized analysis of specific ecosystems by demand, and enhanced access to filters and dashboards on the <a href="StartupBlink map">StartupBlink map</a> are available for <a href="Pro users">Pro users</a>. We would like to thank our Pro members for supporting independent innovation research.

The views presented in this report belong to StartupBlink and are not necessarily shared by any of our partners or advisors. This report is opinionated by design, based on our consulting experience and hundreds of conversations with ecosystem stakeholders. Some of those opinions may be proven wrong.

We would like to thank our talented data contributors from around the world who help us improve the accuracy of the Index. If you are interested in joining them, please <u>apply here.</u>

StartupBlink is hosting a free and open to the public <u>Quarterly Ecosystem Summit</u> where we discuss topics related to startup ecosystem development and host pitching for multiple ecosystems. We also produce a <u>Startup Ecosystem Development Podcast</u> that we hope is useful for those interested in the topic.

Our work is constantly improved by feedback from you, our readers. If you have any feedback, feel free to contact us via <a href="mailto:this form">this form</a> or email us at <a href="mailto:Feedback@StartupBlink.Com">Feedback@StartupBlink.Com</a>

Ziv Baida, PhD Report Editor



# **Introducing Our Local Partners**

StartupBlink works together with dozens of <u>ecosystem partners</u> and <u>report partners</u> who actively support the growth of their startup ecosystem.

#### **Europe**

- Oficina | Innovation Hub [ Albania ]
- Albania Tech [ Albania ]
- Andorra Business [ Andorra ]
- Andorra Research and Innovation [ Andorra ]
- Network State [ Armenia ]
- AustrianStartups [ Austria ]
- City of Ghent [ Belgium ]
- City of Antwerp [ Belgium ]
- Sofia Invest Agency [ Bulgaria ]
- BESCO The Bulgarian Startup Association [ Bulgaria ]
- Increda [ Bulgaria ]
- Invest Czech [ Czech ]
- Rijeka Development Agency PORIN [ Croatia ]
- TechIsland [ Cyprus ]
- The Link [ Denmark ]
- TechBBQ [ Denmark ]
- Startup Estonia [ Estonia ]
- Oulu Startup Incubator [Finland]
- Startup Georgia [ Georgia ]
- City of Magdeburg [ Germany ]
- RuhrHub [ Germany ]
- Berlin Senate Dept. of Econ. Dev. [ Germany ]
- SpinLab [ Germany ]
- Matchmaker.Ruhr [ Germany ]
- wefox [ Germany ]
- Ministry of Development and Innovation [ Greece ]
- Found.ation [ Greece ]
- ATHENS DIGITAL LAB [ Greece ]
- NAStartUp [ Italy ]
- Italian Angels for Growth [ Italy ]
- Giffoni Innovation Hub [ Italy ]
- WeSportUp [ Italy ]
- Digital-Liechtenstein [ Liechtenstein ]
- Startup Lithuania [ Lithuania ]
- Innovation Centre Kosovo [ Kosovo ]
- SEED [ Kosovo ]
- Tech.Mt [ Malta ]
- CoWorkOhrid [ North Macedonia ]

- Geemente Eindhoven [ Netherlands ]
- Mercator Launch [ Netherlands ]
- Venture Lab North [ Netherlands ]
- Oulu Startup Incubator [ Norway ]
- Startup Wroclaw [ Poland ]
- Krakow Miastem Startupow [ Poland ]
- OMGKRK [ Poland ]
- Universidade de Aveiro Incubator [ Portugal ]
- Build Up Labs [ Portugal ]
- ROStartup [ Romania ]
- Make IT in Oradea [ Romania ]
- ACCIO Catalonia Trade & Invest [ Spain ]
- Fundación para el Conocimiento madri+d [ Spain ]
- Equidam [ Spain ]
- repeople [ Spain ]
- Las Rozas Innova [ Spain ]
- SVQ Emprende [ Spain ]
- EIT Urban Mobility [ Spain ]
- Municipality of Malmo [ Sweden ]
- Business Region Göteborg [ Sweden ]
- BaselArea Innovation [ Switzerland ]
- EHL Hospitality Business School [ Switzerland ]
- Izmir Development Agency [ Turkey ] Istanbul
- Development Agency [ Turkey ] Ukrainian Startup
- Fund [ Ukraine ]
- Opportunity Petreborough [ United Kingdom ]
- TechNation [ United Kingdom ]
- 12Ronnies [ United Kingdom ]

#### **Middle East**

- Tamkeen [ Bahrain ]
- Globalization Partners [ Israel ]
- Yokneam [Israel]
- RAK [ United Arab Emirates ]
- Annual Investment Meeting [ United Arab Emirates ]

#### **Asia-Pacific**

- Sunshine Coast Innovation [ Australia ]
- Government of South Australia [ Australia ]
- Canberra Innovation Network [ Australia ]
- Melbourne Angels [ Australia ]
- The State Agency for Public Service and Social Innovations [ Azerbaijan ]
- Technovate [ Azerbaijan ]
- Impactors Connect [ Bangladesh ]
- Zovo Team [ Bangladesh ]
- Innoway [ China ]
- Innovation Drive [ China ]
- ADIF [India]
- Maharashtra State Innovation Society [ India ]
- Tamil Nadu Startup and Innovation Mission [ India ]
- Venture Catalysts [ India ]
- 9 Unicorns [ India ]
- 10000StartupsIndia [ India ]
- Shibuya Startup Support [ Japan ]
- Business Yokohama [ Japan ]

- JETRO Kyoto [ Japan ]
- Kyoto Prefecture [ Japan ]
- Fukuoka City Hall [ Japan ]
- Startup Nation [ Kyrgyzstan ]
- Digital Penang [ Malaysia ]
- MStars Hub [ Mongolia ]
- Science, Industrial Development and Innovation Agency of Ulaanbaatar [ Mongolia ]
- City of Naga [ Philippines ]
- UPGRADE Innolab [ Philippines ]
- Enterprise Singapore [ Singapore ]
- Scaler8 [ Singapore ]
- Seoul Business Angels [ South Korea ]
- DISTEP [ South Korea ]
- Information and Communication Technology Agency[ Sri Lanka ]
- Taiwan Tech Arena [ Taiwan ]
- Adapter [ Vietnam ]

#### **Africa**

- Cabo Verde Digital [ Cape Verde ]
- Angola iSummit 2020 [ Angola ]
- Spurt! [ Ghana ]
- ASSEK [ Kenya ]
- Growth Africa [ Kenya ]
- StartupSouth [ Nigeria ]
- Business Network International (BNI) [ Nigeria ]
- Startup Namibia [ Namibia ]

- Rwanda Development Board [ Rwanda ]
- Response Innovation Lab Somalia [ Somalia ]
- Silicon Cape [ South Africa ]
- APIX-S.A [ Senegal ]
- DER/FJ [ Senegal ]
- Makesense Africa [ Senegal ]
- Afkar [ Tunisia ]
- Response Innovation Lab [ Uganda ]

#### **North America**

- Dassault Systemes SOLIDWORKS [ United States ]
- Idaho Connect [ United States ]
- Innovate PGH [ United States ]
- One Region [ United States ]
- Invest Puerto Rico [ United States ]
- River District Association [ United States ]
- Select USA [ United States ]
- Silicon Vikings [ United States ]
- Start Co. [ United States ]
- WomenVenture [ United States ]

- 805 Startups [ United States ]
- Atlantic Canada Opportunities Agency [ Canada ]
- Startup Montreal [ Canada ]
- Downtown Windsor Business Accelerator [ Canada ]
- Edmonton Economic Development [ Canada ]
- Kingston Economic Development [ Canada ]
- Queens University [ Canada ]
- Gobierno del Estado de Guanajuato [ Mexico ]

#### **South America**

- Buenos Aires Ciudad [ Argentina ]
- Invest São Paulo [ Brazil ]
- ABStartups [ Brazil ]
- Invest.Rio [ Brazil ]
- Curitiba City Hall [ Brazil ]
- Galena [ Brazil ]
- Camara de Commercio de Cali [ Colombia ]

- Camara de Commercio de Bogota [ Colombia ]
- Invest in Bogota [ Colombia ]
- iNNpulsa Colombia [ Colombia ]
- RutaN [ Colombia ]
- TRYCORE [ Colombia ]
- Invest VB [ Peru ]

# StartupBlink Global Data Partners























# Methodology

# This section explains our methodology for producing the Global Startup Ecosystem Index.

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We start with guiding principles, provide relevant definitions, and then discuss the elements comprising each section of the total score.

# **Guiding Principles**

To ensure that the rankings are as accurate as possible, we have based our algorithm on objective, quantifiable data that can be comparatively measured across regions, countries, and cities. We refrained from using subjective tools such as surveys and interviews, and instead utilized data that was either accumulated directly from the StartupBlink map or has arrived from integration with a reliable global data partner.

We allow as few assumptions as possible regarding cause and effect and focus on one thing: measuring results. We avoid relying on any theoretical models assuming the causes of success for startup ecosystems. Our experience in ecosystem consulting shows that no two ecosystems are alike; policies and practices that are successful in one ecosystem can be disastrous in another. It should be noted that the index does not measure urban innovation or implementation of advanced policies related to city development. It focuses instead on the output of entrepreneurial innovation developed in each location.

Most annual rankings face a trade-off between maintaining the consistency of the algorithm and innovating on new elements to improve or adapt the algorithm to changing business environments. We have always leaned toward constantly improving our algorithm so stakeholders can rely on our results to make informed decisions across the board. An algorithm cannot remain unaltered forever; since reality continually changes, so do startup ecosystems. Every year our algorithm is more accurate, and it should be noted that the momentum change of each ecosystem is not only influenced by its achievements over the last year, but also by these algorithm improvements.

We have been sampling startup ecosystem data on the curated and interactive StartupBlink Global Map, which enables us to test and perfect our algorithm based on vast sets of data. We estimate that the core map dataset has a representative sample covering 10-15% of total relevant entities in global startup ecosystems. In addition, hundreds of thousands of entities and data integrations are taken into account via our global data partners. Each location's final score is based on the exact same algorithm. However, we are aware that our sample size fluctuates depending on location and data sourcing. Our only intervention in the score is discounting locations where we determined that the sample size of the entities is higher than average. In order to solve issues with lower than average sample size, we have partnered with approximately 100 Ecosystem Partners, most of which are Government agencies, many of them in locations where our data is limited. We offer all governments administrative access to curate the dataset of their ecosystems, at no cost, granting them complimentary access. For more information, please contact us at Feedback@StartupBlink.com.

It should be noted that the Index is comparative. An ecosystem that has decreased in its rankings has not necessarily performed worse overall than last year. The decrease may simply reflect the faster growth of other ecosystems climbing the rankings.

Organizations interested in a deeper analysis of the algorithm are invited to obtain a <u>StartupBlink PRO</u> account, which offers packages of raw data for all ecosystems, access to unique filters on the map, data exporting options, and access to raw and processed components of our algorithm.

# What is a Startup?

We define a startup as any business that applies an innovative technology-enabled solution that has the potential to achieve scalability.

The innovation can be a product or service, process, or business model. Since this definition is not quantitative, our team manually evaluates most entities that register on the startup map. Entities without a unique innovation, such as non-technological service providers, digital forums built on white-labeled existing technology, and local directories such as simple lists of real estate or jobs listings will not be taken into consideration for the Index.



We do not consider the founding year or team size of a startup as a criterion

for determining startup innovation. However, companies that went through an IPO, acquisition, or received investments in total valuation above US\$ 1 billion will not be categorized as startups, but will still influence the rankings as special entities.

#### **Other Stakeholders and Entities**

Aside from startups, other stakeholders are taken into consideration by our algorithm. The obvious ones are accelerators and coworking spaces, both of which facilitate and contribute to the growth of an ecosystem.

Our algorithm also takes into account special entities which have "graduated" as startups. These entities include Unicorns and Exits. Unicorns are startups that received a total valuation of over US\$ 1 Billion. Unicorns are critical success stories that not only increase the capital flow to the ecosystem but also tend to boost the ecosystem with a powerful story of success that draws more potential entrepreneurs and attracts investors to the location. Exits, on the other hand, are startups that are now publicly listed or merged with a publicly listed company. The valuation of these unicorns and exits are also taken into account in the algorithm.

We should note that our team applies additional filters to Unicorns and Exits, as we disregard entities that are corporate spin-offs or that were created by governments.

Another group of special entities we take into consideration are members of the Startup Pantheon group. This group now consists of more than 230 organizations globally, which can be viewed on the StartupBlink map. Pantheon member is a category coined by StartupBlink which includes companies like SpaceX, Microsoft, and Netflix; companies that are no longer a startup or a unicorn, but still have a substantial impact on their startup ecosystem and its brand. Organizations such as Ycombinator, StartupChile, and the Estonian E-Residency program are also considered part of the Pantheon group, as their trailblazing initiatives impact the growth and legacy of their ecosystems. These Pantheons are categorized into three tiers depending on their impact and quality.

One more factor taken into account in an ecosystem's score is the presence of roughly 150 global startup influencers with impact reaching far beyond their local ecosystems. These influencers are usually CEOs of successful companies, but in some cases they include leading figures in self-funding methodologies or thought leaders in specific technologies. A city where an influencer like Bill Gates or Elon Musk resides has an allure that attracts more entrepreneurs and investors to the ecosystem. 75% of global influencers are currently in the United States, revealing the disproportionate global and cultural influence of this ecosystem. We hope other countries will produce more of these mega high-tech heroes, as they are needed globally for inspiration, financing, and narrative building. Startup Influencers are also categorized into three tiers, similar to Pantheons.

A complete list of the global influencers and members of the Pantheon group is provided in a <u>blog post</u> about those special entities.

# **Determining Location for Startups**

Determining a startup location in today's global economy can be a daunting task. Startups may naturally change locations as they evolve due to tax or marketing reasons. Our guiding principle here is determining which ecosystem pushed it to become what it is today, or, in other words, by asking: where did the magic happen? In some cases a particular ecosystem might not be the current official headquarters of the startup. For example, if a startup was founded and scaled in Finland, retains much of its development team there, and moved their official headquarters to San Francisco for business or tax reasons, we would lean toward attributing it to Finland. Those of you browsing the StartupBlink map might be surprised to see the locations of some notable startups and Unicorns in unexpected locations. The decision to use these locations was made after examining the history and current status of the startup.

# **Distinction Between Countries and Cities Rankings**

We provide two sets of rankings, the first is for countries, and the second is for individual ecosystems nestled within the cities. We have capped the number of countries at 100 and the number of cities at 1000.

Although our database includes additional locations, we find that accuracy decreases the lower an ecosystem is ranked, generally due to the limited number of relevant entities in low-ranked locations. In some cases, the momentum of a specific country and the ranking of its cities might be in opposition; this can happen for a variety of reasons.

One common reason is that our country rankings take into account population size but city rankings do not, ensuring we adjust expectations from countries with relatively low populations in comparison to countries with larger populations. Another reason is that within a specific country, it often happens that some cities have positive momentum while others decline. This is especially relevant in countries with a substantial representation of cities in the top 1000, such as the United States, which has hundreds of cities shuffling through the rankings.

StartupBlink also clusters cities together when they are part of the same urban environment. The most obvious example of this is the San Francisco Bay Area, which includes multiple cities, like San Jose and Palo Alto. The same is done in cities around the world when those locations are part of the same ecosystem. A few examples are Sydney in Australia (clustered with Darlinghurst, North Sydney and several other cities) and The Hague in The Netherlands (clustered with Leiden, Wassenaar and Zoetermeer).

By clustering urban locations into one ecosystem, and not taking into account the population size of the cities in the algorithm, we might seem to be giving an unfair advantage to bigger cities. The truth is that these cities enjoy an advantage in reality, not solely in our algorithm. Bigger cities, from the sheer quantity of entrepreneurs and economic activity, are simply more likely to do better than smaller cities. However, if you use our population filter in the interactive map ranking tables, some inspiring examples of small cities punching above their weight are clearly evident; notable examples include Santa Barbara, California (USA), Kingston (Canada), Cambridge (United Kingdom), Boulder, Colorado (USA), and Burlington, Vermont (USA).

Another important element that provides a ranking advantage to startup ecosystems is the size of the domestic market. Ecosystems with a massive population and market can scale startups much larger without competing internationally. Examples include ecosystems in countries such as China, India, Indonesia, Brazil, and Russia. Results from these countries reflect massive potential, but please note that these might not be the best locations to relocate to unless you plan to target their domestic markets, which can require deep knowledge and understanding of the location and its startup ecosystem.

# **Total Score Ingredients**

Each ecosystem has a total score, which is the sum of 3 subscores measuring Quantity, Quality, and Business environment. A specific analysis of Subscore Results is available in the Analysis by Subscore section of this report.







The total score is designed to be comparative; It is not only used as a mechanism for sorting and ranking ecosystems, but also provides insights into the gaps between ecosystems in absolute terms.

# 1. Quantity Score



# The core question of the Quantity score is: How many?

A robust startup ecosystem not only comprises startups, but must have supporting organizations that provide resources, networking, and access to capital. The Quantity score checks the activity level of an ecosystem through its stakeholders and other key players.

Among the elements taken into account for the calculation of the Quantity score are:

- Number of Startups
- Number of Coworking Spaces
- Number of Accelerators
- Number of Startup related Meetups

Some of this data is supplemented from our Global Data Partners, mainly from Crunchbase, Meetup, and Coworker.

# 2. Quality Score



We have used numerous integrations with partners, such as <u>Semrush</u> and <u>CrunchBase</u>, and hundreds of thousands of data points to analyze the Quality of each startup ecosystem.

Among the elements taken into account for the calculation of the Quality score are:

- Traction of over 100,000 entities in all ecosystems (including traffic, domain authority, and customer base)
- Presence of strategic branches and R&D centers of International Technology Corporations
- Branches of multinational companies (e.g. WeWork spaces)
- Total private sector investment in thousands of startup ecosystems
- Number of employees per startup
- Number and size of global startup events and conferences
- Presence of Unicorns, Exits, and Pantheon companies
- Presence of Global Startup Influencers
- Global startup events (e.g WebSummit)
- Number of startups backed by accelerators (e.g Y Combinator)

# 3. Business Environment Score



The third and final factor affecting the rankings is unique since it focuses on general indicators connected to infrastructure, business environment, ecosystem critical mass, and the ability to freely operate as a startup founder in each country.

The Business Environment score, often abbreviated as simply Business score, is mainly focused on parameters at the country level, since national infrastructure, policies, and legislation generally affect all cities within a country.

The main component of the Business score is a weighted average that takes into account a broad range of elements within each country, as presented in the list below. In addition, the Business score also takes into account a critical mass threshold of activity in a city, which can explain part of the score differential between cities in the same country.

As our policy is to avoid assumptions on the causes influencing the success of an ecosystem, we do our best to avoid indicators that might have an ambiguous influence, and only take into account those which are clearly negative or positive. For example, painfully slow internet or massive restrictions in internet use will most likely form an obstacle to the growth of the ecosystem. On the other hand, we disregard elements like cost of living, since this can have both positive and negative effects on an ecosystem.

Among the elements taken into account for the calculation of the Business score in each ecosystem are:

- Diversity index
- Internet speed
- Internet freedom
- R&D investment
- Availability of various technological services (payment portals, ride-sharing apps, cryptocurrency)
- Number of patents per capita
- Level of English proficiency
- Top universities per location

# **Notable Algorithm Changes in 2022**

As mentioned before, StartupBlink is constantly innovating and changing its algorithm to prioritize accuracy. Main changes in the 2022 Index relate to how special entities are weighted.

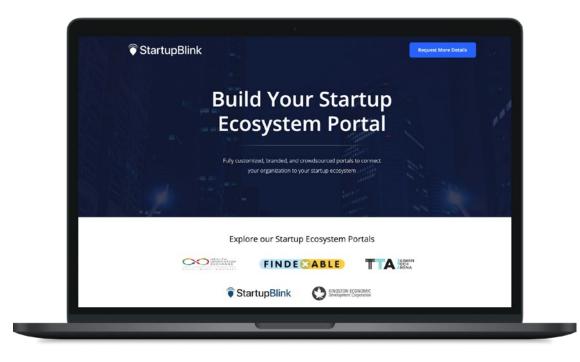
When considering Unicorns and Exits, the Quality score now also takes their valuations into consideration, to reflect their relative "weight." Similarly, Pantheon members and influencers are classified into tiers. This is because not all special entities are equal; some are more impactful than others, and this needs to be reflected in the rankings. Further, we have now factored in exits of less than US\$ 1 billion in the total amount of investment per ecosystem.

A few new elements were added to the Business score this year, including the number of universities per location, the diversity & inclusion index, and new methods to check open regulation, such as the availability of Coinbase and Binance.

Last but not least, our startup data sample size has increased in the last year from 75,000 to over 100,000 startups on our <u>global startup ecosystem map</u>. This allows for more accurate rankings of all ecosystems.

# **Industry Rankings Methodology**

Aside from the general rankings, 11 industry rankings are also featured for the second year in this report. The Methodology used for these rankings is identical to the algorithm of the global rankings, while taking into account the startup database of each industry. The results for each industry (e.g. healthtech, foodtech, hardware & IoT) can be seen in the Industries section of this report. However, the fintech Industry rankings are built on an official Fintech Ecosystem Portal: Findexable's Global Fintech Map, which includes deeper algorithm changes that are customized according to the specific characteristics of the fintech industry.





In this section we present the most notable Index insights of 2022. A more detailed regional analysis is provided in a separate chapter.

# **Trends in Top 20 Countries**



# **Country Rankings Insights**

#### The Top 10

Some interesting shifts are happening in the top 10 countries.

- To start, the US maintains its status as the highest ranked country, with a total score gap almost 4 times that of the second ranked country, the UK. The prediction of a US decline has yet to materialize, with more American cities strengthening and offsetting the gradual demise of San Francisco as the global startup leader. In total, the US has 257 cities in the top 1000 rankings, no other country comes close.
- The UK, however, has substantially increased its lead over the 3rd ranked country, Israel, and is now well entrenched as the 2nd highest ranked country globally. It should also be noted that the UK has an impressive 78 cities ranked, making it the only country other than the US with more than 50 cities in the Index.
- Israel was a whisker away from overthrowing the UK in 2021, and is now not only a distant second, but sees the national ecosystem of Canada, ranked 4th, closing in. Canada, with a successful year, has also created a substantial gap above all ecosystems ranked below it, creating a Big 4 club of countries that have established dominant leading positions.
- The first change in the top 10 is at spot 5, now claimed by Sweden, overtaking Germany at 6th, to become the first ranked EU country in terms of startup ecosystem success. At 7th, Singapore has registered a substantial increase of 3 spots, also making it the highest ranked Asian country in the Index, at China's expense. After negative momentum over the last few years, Australia has managed to register a slight recovery, increasing one spot to 8th. Another impressive jump is registered by France, increasing by 3 spots and entering the top 10 and signaling its potential to become a dominant global ecosystem. Closing the top 10, China, after 3 years of consecutive growth, has seen a substantial decrease of 3 spots and lost its position as the highest ranked Asian economy.

#### From 11 to 20

- Three of the countries (Netherlands, Estonia, Finland) ranked 11-14 have maintained their stability with the same strong position they had last year, keeping them relatively close to the top 10.
- The first change in this batch was a drop by Switzerland, leaving the top 10 to rank 12th.
- Good momentum was registered by Ireland, jumping 3 spots to 15th globally.
- Both the ecosystems of Spain (16th) and Lithuania (17th) registered a mild decline this year.
- The 3 countries closing the top 20 have all increased, starting with Denmark at 18th after an impressive jump, India climbing to 19th, and Japan making it into the top 20.

#### From 21 to 50

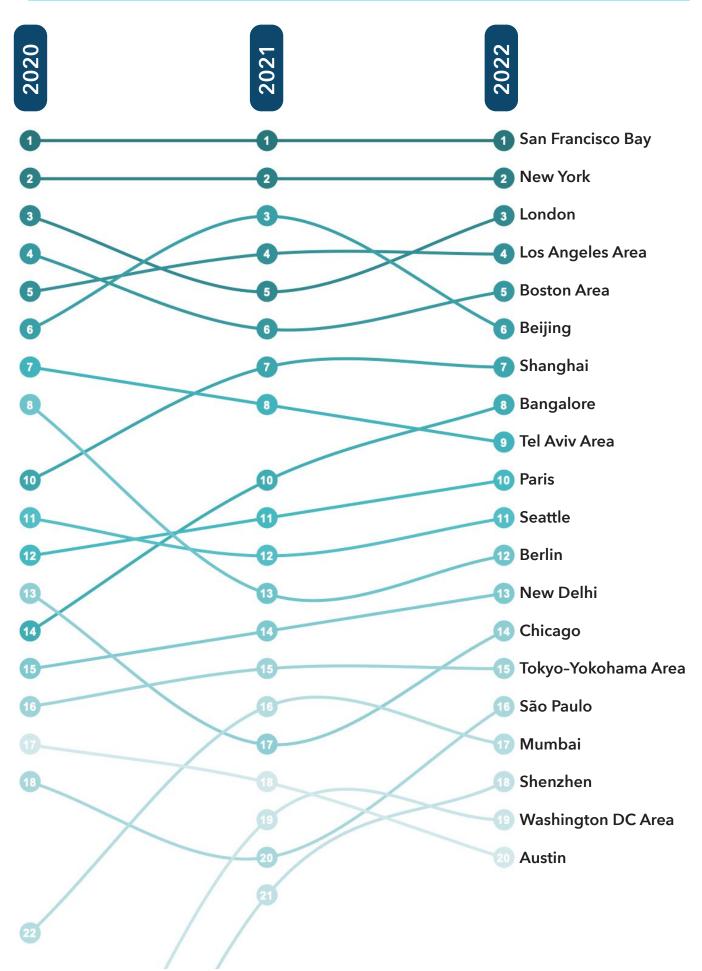
- Three countries are new to the global top 25. The first, Austria, made an impressive advance of 5 spots to rank 23rd. Norway also registered a massive increase, now ranking 24th after jumping 7 spots this year. Closing the top 25 global countries is Taiwan, advancing one spot after most of its second tier cities experienced substantial growth.
- Brazil, the first ranked Latin American country, and the United Arab Emirates, the second ranked MENA region country, both registered mild 2 spot decreases to be ranked 26th and 27th globally.
- Russia, now ranked 29th, has registered a massive decline of 12 spots, reflecting the challenges the war has had on the country's startup ecosystem. New Zealand managed to return to the top 30 after increasing 3 spots this year.
- Poland, at 33rd, further declined by 3 spots this year, continuing an ongoing trend since 2019 when it ranked 20th globally. In the batch of countries ranked 30-50, there are 4 Latin American countries registering positive growth and showcasing the region's advancing ecosystems. Chile is closing in on Brazil, ranked 34th and increasing by two spots. Mexico, ranked 35th, is just behind Chile after registering a 3 spot increase. Argentina at 37th also increased by 2 spots. The last Latin American country ranked in the top 50 is Colombia, now ranked 44th after increasing 3 spots.
- 3 additional countries have advanced substantially in the top 50. The first is Indonesia, advancing 7 spots to rank 38th globally. The second is Iceland, leaping an impressive 14 spots to rank 41st globally. The last is Greece, jumping 6 spots and back into the top 50 at 48th.
- Notable declines in the top 50 include Croatia, ranked 45th after decreasing 8 spots, and Ukraine, decreasing 16 spots to 50th globally. Needless to say, the recent war adversely impacted the impressive Ukrainian startup ecosystem; we hope the country can soon rebound and rebuild.
- It should also be noted that South Africa, although declining by one spot to 49th, is still the only African country in the global top 50.

#### From 51 to 100

Some of the countries showing positive momentum in the 50-100 tier are as follows:

- Vietnam, Armenia, Costa Rica, and Panama have all increased by 5 spots to rank 54th, 60th, 67th, and 78th respectively.
- Helped by the massive leap of the Lagos startup ecosystem, Nigeria switched places with Kenya to become the second highest African country in the index after increasing 2 spots to 61st globally.
- Both Georgia and Mongolia in the growing Central Asian region have increased 7 spots to rank 73rd and 81st respectively. The good news for central Asia does not end there, as Kyrgyzstan makes its debut in the index at 100th.
- The Middle East & Africa region experienced volatility this year. The region is represented by 19 countries in the 51-100 range, and all 19 countries shuffled their rankings this year, with quite a few experiencing sizable shifts up and down the Index. Bahrain increased by 2 spots to rank 64th, while Egypt increased 5 spots to closely follow at 65th. Morocco also registered an impressive jump of 16 spots to rank 79th globally. The small island of Cape Verde is punching above its weight at 80th globally after increasing 7 spots.
- Some of the most notable declines in the 50-100 range include North Macedonia declining 11 spots to 69th globally, Rwanda decreasing 15 spots to 84th, Moldova decreasing 11 spots to 88th, Jamaica decreasing 15 spots to 94th, Bosnia and Herzegovina decreasing 10 spots to 95th, and Kuwait decreasing 9 spots to 99th.
- In addition to the debut by Kyrgyzstan, there are 4 other countries either returning or making their debut this year. The first is the small and beautiful country of Andorra, ranked 89th. The second is Senegal, ranked 92nd. The third is the surprising Kosovo, ranked 96th. The fourth is Angola, ranked 97th.
- The countries that have left the top 100 Index this year are Uganda, Nepal, Ethiopia, Paraguay, and the Dominican Republic.

# Trends in Top 20 Cities



# Cities Rankings Insights

#### The Top 10

This year brings some interesting shifts in the global top 10 cities.

- However, there are no surprises in the highest ranked city, San Francisco, which remains the most prominent global ecosystem by a massive margin. However, the trend of San Francisco losing its relative power continues, as the city gap in total score has constantly narrowed over the years toward closest contender, New York, and rest of the top 10. For reference, in 2019, the total score of San Francisco was 5 times higher than New York. This year, the gap is only 2.5 times higher. San Francisco will continue to be the top global ecosystem for the foreseeable future, but it is no longer the SuperNova it used to be, light years distant from any other startup ecosystem.
- The second highest ranked city, New York, has held second position since 2017, and is also in a league of its own. With a total score 1.7 times higher than the third ranked city, it retains a score gap that will be hard to close in the short term.
- The cities ranked 3rd to 6th have a relatively low total score gap from one another, creating an interesting competition.
- The 3rd ranked city is the first change in the top 10 this year. Congratulations to the city of London, jumping 2 spots to take this prestigious position in the index. London has managed to soar past both Beijing and Los Angeles this year, showing the strength of this inspiring city. It is also the only non-US city in the global top 5.
- Ranked 4th this year is the powerful ecosystem of Los Angeles, holding its position in the Index.
- Ranked 5th is Boston, increasing its position by one spot, and demonstrating its success in several startup industries, primarily Healthtech.
- The biggest decrease in the top 10 was registered by Beijing, the top ranked Chinese ecosystem, dropping 3 spots to rank 6th globally. After years of increase in the Index, it seemed reasonable that Beijing would close gaps with New York and threaten to capture second place. This year has substantially reversed Beijing's positive trend.
- Last year, we coined the term "Big 7" to describe the group of cities that have established a massive gap from all other global startup ecosystems. This year, the club has narrowed to the "Big 6" we have presented so far. Shanghai, the second ranked Chinese Ecosystem, maintained its position at 7th globally, but is separated from the 6 leading cities by a substantial gap in total score, which now makes it much closer to the ecosystems ranked below it.
- Ranked 8th, Bangalore is the strongest startup ecosystem in India, increasing by 2 spots this year and solidifying its position in the global top 10 cities. At 9th, Tel Aviv is the central ecosystem in the startup nation of Israel. Tel Aviv has decreased by one spot this year, but is still going strong in the top 10.
- Paris, ranked 10th, has made it to the top 10 after increasing by one spot this year, guarding its position as the top EU city.

#### From 11 to 50

- Seattle, the home of Microsoft and Amazon, is now the world's 11th ranked ecosystem, after increasing one spot and proving that young startups are also thriving in this high quality city. Berlin, ranked 12th, has also enjoyed a positive momentum this year, increasing by one spot and ranking 2nd in the EU. New Delhi, India's second ranked city, has increased by one spot to 13th globally.
- Chicago has registered a substantial increase of 3 spots to rank 14th globally. Tokyo, at 15th, maintains its position from last year. The biggest jump in the top 20 belongs to Latin America's top startup ecosystem, São Paulo, jumping 4 spots and now ranking 16th globally. Mumbai, India's 3rd ranked city, has registered a mild decrease of one spot to rank 17th globally.
- Shenzhen, a global hardware startup hub and the third ranked Chinese city, has jumped 3 spots to rank 18th globally. The city's achievement is even more impressive considering that both Beijing and Shanghai had negative momentum this year. Ranked 19th, like last year, is Washington DC, another powerful US hub. Closing the top 20 is Austin, decreasing by 2 spots this year. Austin enjoys a massive amount of hype and created a great ecosystem, but cannot deliver the substantial results necessary to close gaps with other top American cities.
- Singapore City, ranked 22nd, has registered a jump of 3 spots to become a powerful regional hub in Asia. Both Stockholm (23rd) and Amsterdam (27th) managed to achieve good momentum this year, creating a strong second tier of leading EU ecosystems after Paris and Berlin. Toronto, in Canada, has reentered the global top 25 with an increase of 2 spots.
- Moscow has registered the steepest index decline in the top 50 ranked cities, after decreasing 20 spots to rank 29th globally. Hangzhou, the 4th ranked city in China, has joined the top 30 after increasing by 3 spots this year.
- Salt Lake City-Provo ranks 31st this year after an impressive 24 spot jump, partly due to city clustering. Hong Kong, ranked 36th, dropped 4 spots and now ranks 5th in China, after ranking 2nd in 2019. Mexico City, now ranked 44th, registered an impressive jump of 6 spots, sending a clear signal that Mexico's startup ecosystem is enjoying great momentum. Dublin is now ranked 46th after jumping 5 spots, bringing Ireland's top ecosystem back into the top 50.

#### From 51 to 100

Some notable changes in cities ranked 51-100 are as follows:

- Guangzhou, China, has registered another impressive jump of 14 spots, and is now ranked 51st. With continued positive momentum next year, China could increase its number of cities in the top 50 to 6. Copenhagen, the capital of Denmark, is finally getting closer to the top 50 after increasing 8 spots to rank 53rd this year, its highest ranking since we published the Index in 2017. Boulder, a small city but promising "give first" startup city in the United States, continues its positive momentum by increasing 4 spots to rank 55th. Another two American cities registering impressive jumps are Pittsburgh, increasing 15 spots to rank 58th, and Kansas, jumping 29 spots to rank 69th.
- Buenos Aires gives another indication of positive momentum in Latin American top startup hubs, with an increase of 4 spots to rank 55th. This momentum can also be seen with the increase of Bogota by 7 spots to 70th globally.

- Brussels has demonstrated the best growth in Europe this year, jumping 13 spots to rank 59th. Manchester, the second highest UK city, has increased 8 spots, hopefully finally making it possible for a second UK city to rank in the top 50 and offset the dominance of London. Two additional European winners this year are Vienna, jumping 14 spots to rank 71st, and Oslo, jumping 27 spots to rank 72nd. One of the most celebrated and interesting jumps this year is from Lagos, jumping 41 spots to rank 81st. Lagos is the first African city to ever reach the global top 100, congratulations!
- One of the notable declines in this tier was registered in Zurich, which decreased 11 spots to rank 68th globally. Jerusalem lost its second rank in the MENA region after a massive drop of 32 spots to 86th. Kyiv, the capital of Ukraine, has registered the biggest drop in the top 100, declining 45 spots to 93rd. The implications of current events are still unclear, and we hope the city regains its outstanding momentum and talent soon. Two major Asian cities have also substantially decreased and are now at risk of losing their top 100 ranking. The first is Bangkok, decreasing 28 spots to rank 99th, and Manila, decreasing 13 spots to rank 100th globally.
- A few new cities made it to the top 100 this year, including two Indian cities: Pune, increasing 14 spots to rank 90th globally, and Hyderabad, increasing 9 spots to rank 97th. Two additional entrants are Edinburgh, increasing 6 spots and giving the UK 6 cities in the top 100, and Louisville in the United States, jumping an impressive 62 spots to rank 98th.

#### From 101 to 200

In ecosystems ranked 101-200 there were some notable changes.

- Firstly, a few Asian Pacific ecosystems such as Brisbane (101st) and Chennai (102nd) are getting very close to achieving a top 100 ecosystem status.
- Some startup ecosystems in Central Europe have registered a decline in rank, including the top 3 ecosystems of Poland (Warsaw, Krakow and Wroclaw), and Budapest, the Capital of Hungary, all of which decreased by double digits.
- Some of the most substantial jumps in this tier were registered by Ho Chi Minh City, now ranked 111th after increasing by 68 spots, Boise, ranked 120th globally after jumping 77 spots, Zug at 121st globally after increasing by 45 spots, Athens at 132nd after increasing by 21 spots, and Cairo at 160th after increasing by 20 spots. Curitiba in Brazil is also one of the only cities in this country to register good momentum in 2022, solidifying its 2nd rank nationally and ranking 141st globally.
- Two Swedish cities, Malmö (up 18 positions) and Gothenburg (up 6 positions) have also boosted the Swedish ecosystem status this year, closing gaps with the country's top ecosystem, Stockholm.
- A few United Kingdom cities have also enjoyed a jump of more than 50 spots in the rankings. Those include Leeds, Newcastle upon Tyne, and Sheffield.
- Some new entrants to the top 200 cities this year include Winnipeg, Canada (ranked 192nd), Sankt Gallen, Switzerland (193rd), Oulo, Finland (195th), Hshinchu, Taiwan (196th), and Stavanger, Norway (198th).

# From 201 and beyond

As we move further down the Index, we find higher volatility due to lower amounts of information on each city. However, we would like to mention a few cities with positive momentum from locations that inspired us this year.

- Starting with Europe, Aarhus, Denmark's second highest startup ecosystem, increased by 15 spots, signaling the country's solid momentum this year. The charming city of Galway in Ireland increased by 21 spots to rank 298th globally, becoming a new top 300 city. The small and scenic city of Donostia San Sebastian in Spain jumping 193 spots is also a pleasant surprise.
- Moving on to Africa and the Middle East region, we see Manama, the capital of Bahrain, increased its ranking by 8 spots, and Dakar, the capital of Senegal, jumped by an impressive 333 spots to reach the global top 500.
- A few Asian Pacific success stories this year are Fukuoka, increasing by 20 spots to rank 220th globally, and Christchurch in New Zealand increasing by 168 spots and achieving a top 250 global city status. Three central Asian cities, Nur Sultan, Ulaanbaatar, and Tbilisi, are also registering positive momentum.
- Several Latin American cities have registered great results this year, including two Colombian cities, Cali and Barranquilla, one Mexican city, Puebla, and Cordoba in Argentina.
- Last but not least, Island cities are on the rise. We have seen great momentum from cities such as Nassau, Valletta, Limassol, and Douglas on the Isle of Man. We hope to see a unicorn island startup soon, the sky's the limit.

# **Ecosystem Variety Key Insights**

The interesting Ecosystem Variety chapter also reveals insights about the number of cities per country and their distribution in the tiers.

Some notable gainers this year include the United Kingdom, increasing the number of its represented cities in the global top 1000 ecosystems to 78, an impressive increase of 20 new cities. Canada has also increased its number of cities by double digits, now boasting 41 cities compared to 30 in 2021. Spain, although underperforming in the Index this year, managed to increase the number of its represented cities to 39 from 28. The most notable decrease of ecosystems was registered in Brazil, which now has 24 cities represented in the Index compared to 32 in 2021. The continous growth of the outstanding ecosystem of São Paulo shows how centric the Brazil ecosystem is, and how other cities have not managed to build seed ecosystems, probably due to lack of resources which then pushes talent from those cities into São Paulo.

# **Regional Analysis Key Insights**

The regional analysis section of the report is brimming with information about trends at the regional level.

- North America is once again the most successful region, with a high presence of cities in all top tiers and generally positive momentum from both United States and Canadian cities.
- Europe has had another interesting year. It has the highest number of countries and cities in the rankings, but many of them, especially in Eastern and Central Europe, have experienced negative momentum.
- The results documented in the Asia Pacific region were largely positive, as most of the top ranked countries and cities increased their rankings. The main concern is the surprising negative momentum in Asia's most powerful ecosystem, China.
- As for Latin America, the trend is mostly positive. The top Latin American cities have substantially increased in rank, solidifying their positions as substantial hubs of regional and global innovation. However, the Latin American tech scene has become much more centralized; while top cities increase in their rankings, 22 cities dropped out of the Index this year. This leaves the region with only 60 cities in the Index.
- The results in Africa and the Middle East were less positive, as the number of cities representing the region decreased to 57, compared to 74 cities last year. Africa, however, managed to get one city, Lagos, into the global top 100, making it the only African city to ever reach this rank.

# **Industry Analysis Key Insights**

The industry section of the report presents the top 30 global winners across 11 startup industries.

- The most interesting insight of this section is that San Francisco is ranked 1st in all 11 industries globally, showing the immense strength of this ecosystem and its ability to innovate in every startup industry. Last year, San Francisco ranked 1st in all industries except Foodtech, but this year managed to take the lead from New York in this category as well.
- When analyzing leading cities across these ranked industries, New York appears in the top 3 of 7 out of 11 industries. Boston is a top 3 city in 4 industries, while Beijing is a top 3 city in 3 industry rankings.
- Aligned with its overall climb up the Index, Lagos is ranked 24th globally in the Foodtech industry, and is the only African city to rank in the global top 30 for any of these 11 industries.

# Global Startup Ecosystem Index: Top Countries

Rank	Country	Rank Change (from 2021)	Quantity Score	Quality Score	Business Score	Total Score
1	<u>United States</u>	_	27.56	164.15	3.66	195.370
2	<u>United Kingdom</u>	-	12.66	36.10	3.79	52.555
3	<u>lsrael</u>	-	7.10	34.82	3.15	45.062
4	<u>Canada</u>	-	9.40	22.35	3.51	35.264
5	<u>Sweden</u>	+1	4.68	20.03	3.80	28.502
6	<u>Germany</u>	-1	4.96	16.84	3.53	25.334
7	<u>Singapore</u>	+3	3.98	17.18	2.24	23.408
8	<u>Australia</u>	+1	5.95	12.86	3.64	22.454
9	<u>France</u>	+3	4.82	12.77	3.40	20.994
10	<u>China</u>	-3	1.97	16.04	2.65	20.663

# Global Rankings: Countries •

Rank	Country	Rank Change (from 2021)	Quantity Score	Quality Score	Business Score	Total Score
11	The Netherlands	_	4.42	12.71	3.38	20.505
12	<u>Switzerland</u>	-4	6.19	10.48	3.57	20.253
13	<u>Estonia</u>	-	4.14	10.77	3.34	18.243
14	<u>Finland</u>	-	3.99	10.18	3.68	17.852
15	<u>Ireland</u>	+3	3.88	8.54	3.49	15.914
16	<u>Spain</u>	-1	5.71	6.07	2.71	14.481
17	<u>Lithuania</u>	-1	4.07	7.00	3.13	14.194
18	<u>Denmark</u>	+4	3.06	7.45	3.69	14.193
19	<u>India</u>	+1	2.19	7.62	2.46	12.476
20	<u>Japan</u>	+1	2.41	6.61	2.93	11.947
21	South Korea	-2	1.43	6.95	3.25	11.626
22	<u>Belgium</u>	+1	2.71	5.29	2.80	10.806
23	<u>Austria</u>	+5	2.46	4.50	3.26	10.221
24	<u>Norway</u>	+7	2.09	5.05	3.26	10.209
25	<u>Taiwan</u>	+1	2.41	4.91	2.91	10.189
26	<u>Brazil</u>	-2	1.40	5.91	2.17	9.480
27	<b>United Arab Emirates</b>	-2	2.19	4.30	2.92	9.412
28	<u>Portugal</u>	-1	2.20	4.08	3.11	9.390
29	<u>Russia</u>	-12	2.27	4.52	2.57	9.355
30	New Zealand	+3	1.92	2.67	3.59	8.177
31	<u>ltaly</u>	-2	2.56	2.49	3.04	8.090
32	<u>Czechia</u>	-	1.33	3.61	3.15	8.087
33	<u>Poland</u>	-3	1.86	2.31	3.02	7.182
34	<u>Chile</u>	+2	1.40	2.64	2.56	6.589
35	<u>Mexico</u>	+3	0.79	2.80	2.43	6.021
36	<u>Bulgaria</u>	-1	2.15	1.21	2.60	5.961
37	<u>Argentina</u>	+2	1.24	2.40	2.03	5.674
38	<u>Indonesia</u>	+7	0.46	3.40	1.72	5.586
39	<u>Romania</u>	+2	1.09	1.60	2.76	5.449
40	Luxembourg	+3	1.42	1.98	2.05	5.447

# Global Rankings: Countries •••

Rank	Country	Rank Change (from 2021)	Quantity Score	Quality Score	Business Score	Total Score
41	<u>lceland</u>	+14	5.43	1.76	0.95	5.427
42	<u>Malaysia</u>	-2	5.42	1.00	1.70	5.416
43	<u>Latvia</u>	-1	5.38	1.68	0.63	5.383
44	<u>Colombia</u>	+3	5.36	0.91	2.13	5.357
45	<u>Croatia</u>	-8	5.12	1.30	0.97	5.115
46	<u>Turkey</u>	-2	4.95	1.10	1.51	4.948
47	<u>Slovenia</u>	-1	4.87	1.28	0.92	4.870
48	<u>Greece</u>	+6	4.83	1.04	1.39	4.834
49	South Africa	-1	4.47	0.65	1.34	4.466
50	<u>Ukraine</u>	-16	4.39	0.78	1.86	4.389
51	<u>Hungary</u>	-2	4.30	1.20	0.62	4.300
52	<u>Serbia</u>	+1	4.29	1.39	0.63	4.289
53	<u>Thailand</u>	-3	3.75	0.45	1.26	3.752
54	<u>Vietnam</u>	+5	3.46	0.29	1.46	3.462
55	<u>Cyprus</u>	+2	3.32	0.83	0.58	3.318
56	<u>Uruguay</u>	-5	3.30	0.38	1.24	3.304
57	<u>Philippines</u>	-5	3.30	0.55	1.16	3.302
58	<u>Slovakia</u>	-2	2.45	0.69	0.30	2.449
59	<u>Malta</u>	+1	2.26	0.73	0.28	2.262
60	<u>Armenia</u>	+5	2.15	0.44	0.58	2.151
61	<u>Nigeria</u>	+2	2.15	0.38	0.97	2.145
62	<u>Kenya</u>	-1	2.10	0.49	0.54	2.101
63	<u>Peru</u>	-1	2.05	0.27	0.70	2.052
64	<u>Bahrain</u>	+2	1.90	0.55	0.30	1.903
65	<u>Egypt</u>	+5	1.78	0.50	0.51	1.777
66	<u>Jordan</u>	-2	1.65	0.34	0.52	1.647
67	Costa Rica	+5	1.45	0.15	0.52	1.445
68	<u>Liechtenstein</u>	-	1.25	0.40	0.14	1.245
69	North Macedonia	-11	1.16	0.42	0.13	1.162
70	<u>Belarus</u>	-3	1.09	0.38	0.13	1.092

# Global Rankings: Countries

Rank	Country	Rank Change (from 2021)	Quantity Score	Quality Score	Business Score	Total Score
71	Mauritius	+2	0.22	0.24	0.56	1.021
72	Saudi Arabia	-1	0.28	0.16	0.51	0.943
73	<u>Georgia</u>	+7	0.29	0.13	0.51	0.931
74	<u>Kazakhstan</u>	+2	0.26	0.15	0.50	0.910
75	<u>Albania</u>	+3	0.33	0.10	0.44	0.876
76	<u>Pakistan</u>	-1	0.21	0.24	0.27	0.717
77	<u>Lebanon</u>	-3	0.38	0.10	0.23	0.709
78	<u>Panama</u>	+5	0.10	0.21	0.32	0.633
79	<u>Morocco</u>	+16	0.09	0.18	0.32	0.594
80	Cape Verde	+7	0.30	0.07	0.21	0.583
81	<u>Mongolia</u>	+7	0.19	0.07	0.24	0.582
82	<u>Ghana</u>	-1	0.14	0.19	0.25	0.581
83	<u>Tunisia</u>	-1	0.21	0.09	0.24	0.548
84	<u>Rwanda</u>	-15	0.13	0.15	0.22	0.497
85	<u>Azerbaijan</u>	+4	0.18	0.06	0.26	0.494
86	<u>Qatar</u>	-2	0.16	0.08	0.25	0.492
87	<u>Ecuador</u>	-1	0.14	0.11	0.19	0.441
88	<u>Moldova</u>	-11	0.14	0.07	0.23	0.437
89	<u>Andorra</u>	new	0.13	0.06	0.24	0.430
90	<u>Sri Lanka</u>	+2	0.16	0.06	0.18	0.402
91	<u>Namibia</u>	+8	0.16	0.09	0.16	0.398
92	<u>Senegal</u>	+13	0.05	0.16	0.14	0.356
93	<u>Bangladesh</u>	_	0.11	0.14	0.12	0.321
94	<u>Jamaica</u>	-15	0.09	0.06	0.16	0.317
95	Bosnia and Herzegovina	-10	0.10	0.07	0.14	0.308
96	Kosovo	new	0.05	0.08	0.14	0.281
97	<u>Angola</u>	+18	0.15	0.06	0.07	0.275
98	<u>Somalia</u>	-4	0.20	0.05	0.02	0.270
99	<u>Kuwait</u>	-9	0.07	0.07	0.12	0.260
100	<u>Kyrgyzstan</u>	new	0.08	0.06	0.12	0.258

# Global Startup Ecosystem Index: Top Cities

Rank	City	Country	Rank Change (from 2021)	Total Score
1	San Francisco Bay	United States	_	550.269
2	New York	United States	-	217.002
3	London	United Kingdom	+2	125.637
4	Los Angeles Area	United States	-	113.855
5	Boston Area	United States	+1	108.050
6	Beijing	China	-3	102.695
7	Shanghai	China	_	70.617
8	Bangalore	India	+2	63.282
9	Tel Aviv Area	Israel	-1	54.890
10	Paris	France	+1	52.877
11	Seattle	United States	+1	51.966
12	Berlin	Germany	+1	48.355
13	New Delhi	India	+1	43.043
14	Chicago	United States	+3	40.970
15	Tokyo-Yokohama Area	Japan	new	37.490
16	São Paulo	Brazil	+4	36.655
17	Mumbai	India	-1	36.211
18	Shenzhen	China	+3	35.101
19	Washington DC Area	United States	-	34.963
20	Austin	United States	-2	32.906
21	San Diego	United States	+1	32.558
22	Singapore City	Singapore	+3	32.279
23	Stockholm	Sweden	+1	31.273
24	Toronto	Canada	+2	31.266
25	Seoul	South Korea	-2	30.111

# **Global Rankings: Cities**

Rank	City	Country	Rank Change (from 2021)	Total Score
26	Dallas-Fort Worth	United States	+1	29.353
27	Amsterdam	The Netherlands	+2	26.807
28	Atlanta	United States	_	26.528
29	Moscow	Russia	-20	25.082
30	Hangzhou	China	+3	24.846
31	Salt Lake City-Provo Area	United States	+24	24.706
32	Jakarta	Indonesia	+2	24.437
33	Miami Area	United States	-2	24.144
34	Denver	United States	-4	24.044
35	Philadelphia	United States	-	23.199
36	Hong Kong	China	-4	22.091
37	Barcelona	Spain	-	20.669
38	Sydney	Australia	-2	20.490
39	Munich	Germany	-1	19.652
40	Vancouver	Canada	+2	18.880
41	Raleigh Durham	United States	-1	18.648
42	Melbourne	Australia	-3	17.142
43	Minneapolis	United States	-	16.970
44	Mexico City	Mexico	+6	15.691
45	Montreal	Canada	+1	15.084
46	Dublin	Ireland	+5	15.049
47	Taipei City	Taiwan	-6	14.955
48	Helsinki	Finland	-4	14.795
49	Houston	United States	+3	14.596
50	Madrid	Spain	-5	14.378

# **Global Rankings: Cities**

Rank	City	Country	Rank Change (from 2021)	Total Score
51	Guangzhou	China	+14	13.486
52	Phoenix	United States	-5	13.383
53	Copenhagen	Denmark	+8	13.149
54	Portland	United States	-1	12.152
55	Boulder	United States	+4	11.454
56	Buenos Aires	Argentina	+4	10.938
57	Detroit	United States	-8	10.927
58	Pittsburgh	United States	+15	10.908
59	Brussels	Belgium	+13	10.534
60	Manchester	United Kingdom	+8	10.406
61	Dubai	United Arab Emirates	+6	10.328
62	Tallinn	Estonia	+4	10.301
63	Cambridge	United Kingdom	+13	10.219
64	Columbus	United States	+11	10.117
65	Milan	Italy	-9	9.943
66	Istanbul	Turkey	+3	9.908
67	Santiago	Chile	+3	9.708
68	Zurich	Switzerland	-11	9.625
69	Kansas City	United States	+29	9.593
70	Bogota	Colombia	+7	9.467
71	Vienna	Austria	+14	9.449
72	Oslo	Norway	+27	9.398
73	Charlotte	United States	-15	9.208
74	Nashville	United States	-11	9.137
75	Hamburg	Germany	-11	9.078

# Global Rankings: Cities

Rank	City	Country	Rank Change (from 2021)	Total Score
76	Tampa Bay Area	United States	+5	8.865
77	Las Vegas	United States	-15	8.794
78	Chengdu	China	+8	8.460
79	Wilmington	United States	+16	8.456
80	Vilnius	Lithuania	+4	8.444
81	Lagos	Nigeria	+41	8.378
82	Prague	Czechia	+1	8.346
83	Lisbon	Portugal	-1	8.300
84	Santa Barbara	United States	-10	8.235
85	Sacramento	United States	+3	8.201
86	Jerusalem	Israel	-32	8.068
87	Burlington	United States	+28	8.043
88	Kuala Lumpur	Malaysia	-8	8.006
89	Ottawa	Canada	_	7.943
90	Pune	India	+14	7.921
91	Kitchener Waterloo	Canada	+10	7.916
92	Baltimore	United States	+8	7.905
93	Kyiv	Ukraine	-45	7.892
94	Bristol	United Kingdom	-4	7.806
95	Oxford	United Kingdom	-3	7.704
96	Edinburgh	United Kingdom	+6	7.682
97	Hyderabad	India	+9	7.633
98	Louisville	United States	+62	7.451
99	Bangkok	Thailand	-28	7.355
100	Manila Area	Philippines	-13	7.327

To view cities ranked 101-1000, refer to the <u>Appendix A</u>.

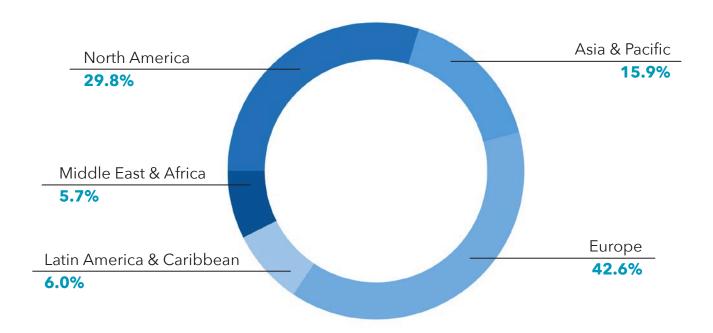
# Regional Analysis

# This chapter explains the rankings from a regional perspective and is divided into three sections:

- First, we discuss the distribution of the global top 100 ranked countries and the global top 1000 ranked cities across all regions, reflecting on regional momentum.
- Second, we provide a regional analysis of startup funding.
- Third, we examine each region independently and in more depth.

# **Power Shifts and Regional Momentum**

Investigating how cities are distributed throughout the global top 1000 helps us understand how each region compares in both activity and momentum.



■ We start with the momentum of North America, which includes ecosystems from only two countries: The United States and Canada. North America accounted for 29.7% of ranked cities last year, and has kept its representation stable with 29.8% of the top 1000 cities this year.

- It should be noted that although North America is not the region with the most cities in the top 1000, it is by far the most dominant region among the top 100 cities, leading in both the number of cities ranked between 1-30, where it has 12 cities (40%), and cities ranked 31-100, where it has 28 cities (also 40%). By comparison, Europe, which leads in the number of cities in the rankings (42.6%), has only 6 cities in the top 30 (20%), and 23 cities ranked 31-100 (32%). Similarly, North America clearly dominantes the top charts of all ranked startup industries, as presented later in the report. The city of San Francisco is the undisputed leader in all ranked industries, and some of its key contenders, New York, Los Angeles, and Boston, demonstrate that North American ecosystems and particularly those in the US are dominant hubs of global innovation.
- The European region has the most cities in the global top 1000, with 426 cities in 2022 (42.6%), compared to 386 cities (38.6%) in 2021. The number of European countries in the top 100 increased, from 44 in 2021 to 46 in 2022. This reveals the massive diversity of technological hubs in Europe. And yet, Europe's momentum is not entirely positive. While Europe's presence among the top 1000 cities improved, only 18 of 46 ranked European countries improved their rankings this year, and 20 of them dropped. Further, 132 ranked European cities improved their rankings (excluding the cities that joined the ranking for the first time), while 200 cities dropped in rank. This suggests that while there is much startup activity in Europe, the European region is still lagging behind other regions in realizing high impact startup economies. This is further demonstrated by the fact that the European region is stronger on the number of cities ranked on the bottom tiers: 84 cities ranked 101-300 (42%), and 313 cities ranked 301-1000 (44%). There is a lot of startup activity in Europe, but much of it does not scale up to global levels. Unlike North America, Europe does not share a common language, which might explain why startups find it more difficult to scale as compared to North American ecosystems. In an interesting analysis, The Economist has shown that while the USA spawned 4 tech companies reaching a combined \$1 trillion in valuation over the last 3 decades (Google, Amazon, Tesla, and Facebook), None of Europe's tech youths has managed to reach \$100 billion in valuation. These have been disappointing decades when considering the potential of Europe to lead the world on technology and innovation. Recent trends indicate that with a focus on sustainability and new technologies, this might be finally changing.
- Asia-Pacific regional performance is generally positive. Only 6 of the 19 ranked countries in this region decreased their rankings, consolidating the area as a global leader in innovation. The region's ecosystems are maturing, as 7 out of the 10 Asian Pacific countries ranked in the top 50 have improved their rankings. In the global top 100 cities, the region increased from 20 to 22, showing that the region is growing its global dominance, with three countries now in the global top 10.
- One cannot discuss the state of Asia Pacific without mentioning China, which plays a unique role in the growth of the region due to its size and economic clout. Unless reversed, China's negative momentum this year may negatively influence this region's overall performance in upcoming years. As we discuss in this report, China dropped in the ranking this year, its score falling to a level that threatens its position in the global top 10 next year. A further sign of a Chinese decline in comparison to North American startups is given in the chapter "Ecosystem Ranking by Number of Special Entities" of this report. Our analysis shows that the pace of producing unicorns and exits in the US has been significantly higher than in China this year.

- Latin America and the Caribbean is another region with mixed results of successful top ecosystems maturing while lower level ecosystems fall from the rankings. A first glance shows a negative result: the number of LAC countries in the global top 100 decreased from 13 to 11, with Paraguay and the Dominican Republic leaving the Index. However, 4 of the top 5 countries in this region (Chile, Mexico, Argentina and Colombia) climbed up the rankings. On the city level, the region accounts for 60 ecosystems in the global top 1000 (6%), a steep drop from 82 cities (8.2%) one year ago. Among the remaining 60 cities, only 23 improved their rankings this year, while 33 dropped. And yet, as our further in-depth analysis below will reveal, this has been a massively successful year for the region's top cities, and overall we consider this a good year for the region.
- The last region included in our analysis is the Middle East & Africa. At the country level, the region remained stable, with 22 countries ranked (although there were some swaps, with Uganda and Ethiopia leaving the top 100, and Senegal and Angola entering). At the city level, the results are mostly negative for the region: in 2021, 74 cities in the global top 1000 (7.4%) were from the Middle East & Africa, this year the number is just 57 (5.7%), 13 of which are from a single country, Israel. The region experienced net losses of 5 cities in the 101-300 range, and 13 cities in the 301-1000th range. Only 15 of the 57 ranked cities improved this year, while 34 cities had a negative momentum. However, it should be noted that 2022 brings with it a substantial milestone: this is the first year where an African city (Lagos) made the global top 100 list.

In the following table, we present the number of cities ranked by region and their distribution within the global top 1000 in both 2022 and 2021.

		Number	of cities	per Tie	r: 2022			Number	of cities	per Tieı	r: 2021	
Region	Total	% of Top- 1000	#1– 30	#31– 100	#101– 300	#301– 1000	Total	% of Top- 1000	#1– 30	#31– 100	#101– 300	#301– 1000
North America	298	29.8%	12	28	63	195	297	29.7%	13	27	53	204
Asia Pacific	159	15.9%	10	12	31	106	161	16.1%	9	11	38	103
Europe	426	42.6%	6	23	84	313	386	38.6%	6	26	83	271
Latin America & Caribbean	60	6.0%	1	4	13	42	82	8.2%	1	4	12	65
Middle East & Africa	57	5.7%	1	3	9	44	74	7.4%	1	2	14	57
Total	1000		30	70	200	700	1000		30	70	200	700

Explore startup ecosystems by geographical and business region, using the <u>StartupBlink PRO Map</u>.

# **Ecosystem Funding by Region**

Besides the number of ranked countries and cities from each region, a regional analysis of the funding received by startups provides interesting insights. This analysis was done for 2021, and includes early and late stage investments to startups by professional firms (such as Angel, Pre-Seed, Seed and Series A to J), as well as other types of investments destined for startups, such as Grants, Equity and Product Crowdfunding, and Non-Equity Assistance.



While only 29.8% of the global top 1000 cities are in North America, more than half of the global startup funding is received by North American startups.

A similar picture, although less extreme, is seen in Asia Pacific, with 15.9% of the top 1000 cities and 24.0% of all startup funding.

On the other side of the spectrum, Europe has 42.6% of the top 1000 startup ecosystems, but only 18.3% of startup funding.

Also underperforming are Latin America & the Caribbean (with 6.0% of cities in the top 1000 and only 2.9% of startup funding) and the Middle East & Africa (with 5.7% of cities in the top 1000 and 2.5% of startup funding).

Two further interesting facts are related to the Asia Pacific region and to the Middle East & Africa region. While, overall, the Asia Pacific region is over-represented in global startup funding, this is not the case for most of the region's countries, as 57% of this region's funding flows to one country: China.

Similarly, 69% of the funding in the Middle East & Africa goes to Israeli startups. Both of these regions are characterized by one strong player - China and Israel respectively - while startups in other countries receive substantially less funding.

These results highlight that:

- North American startup dominance is even stronger than what is visible in the global startup ecosystem Index
- Half of regional investment in Asia-Pacific startups is going to China. This observation is very interesting, given that our Special Entities analysis revealed that the pace of producing unicorns and exits in China significantly lags behind the US, although as we see here plenty of money is flowing into Chinese startups.
- Europe may have a very diverse startup scene, with a large number of active and successful ecosystems, yet investors see more potential in North America and Asia Pacific.
- Israel's regional dominance is absolute, with 67% of the funding for the Middle East & Africa funneled to fund promising Israeli innovations.



# **Regional Deep Dive**

## **North America**

The North America region may be the smallest in number of countries (just the United States and Canada), but it is the heart of the global startup scene.

Both countries are ranked in the top 5, and 4 North American cities make it into the top 5: San Francisco Bay, New York, the Los Angeles Area, and the Boston Area. The sheer totals are impressive: North America has 298 startup ecosystems in the global top 1000, with 257 from the United States and 41 from Canada. In spite of the stable rankings, the gap between the US and its contenders, including Canada, is decreasing consistently over time. Last year, the US score was 526% better than Canada's score. This year, the difference dropped to 454%, showing that Canada is slowly reducing the gap. It's worth noting that Mexico is included in the Latin America & Caribbean region.

The United States and Canada both kept their rankings from last year - 1st and 4th, respectively - keeping up with the pace of countries that are also quite strong in our rankings (the United Kingdom and Israel, which also kept their spots at 2nd and 3rd). At the city level, San Francisco is still the undisputed startup center of the world, with New York and Los Angeles keeping last year's ranks of 2nd and 4th globally. Boston and Seattle complete North America's top 5, both climbing one spot to 5th and 11th, respectively. From Canada, the top cities are Toronto (ranked 24th globally), Vancouver (40th), and Montreal (45th), all experiencing slight increases.

Regional Rank	Country	Number of ranked cities	Global Rank	Rank Change (from 2021)	Total Score
1	United States	257	1	_	195.370
2	Canada	41	4	-	35.264

It's worth noting that North American dominance extends to all ranked industries; San Francisco leads across all industries, and the gap between US and non-US cities is substantial, albeit decreasing, across almost all industries.

Top 20 ranked cities

Regional Rank	City	Country	Global Rank	Rank Change (from 2021)	Total Score
1	San Francisco Bay	United States	1	_	550.269
2	New York	United States	2	-	217.002
3	Los Angeles Area	United States	4	+1	113.855
4	Boston Area	United States	5	+1	108.050
5	Seattle	United States	11	+3	51.966
6	Chicago	United States	14	-	40.970
7	Washington DC Area	United States	19	-2	34.963
8	Austin	United States	20	+1	32.906
9	San Diego	United States	21	+2	32.558
10	Toronto	Canada	24	+1	31.266
11	Dallas-Fort Worth	United States	26	_	29.353
12	Atlanta	United States	28	+24	26.528
13	Salt Lake City - Provo Area	United States	31	-2	24.706
14	Miami Area	United States	33	-4	24.144
15	Denver	<b>United States</b>	34	_	24.044
16	Philadelphia	United States	35	+2	23.199
17	Vancouver	Canada	40	-1	18.880
18	Raleigh Durham	United States	41	-	18.648
19	Minneapolis	United States	43	+1	16.970
20	Montreal	Canada	45	1	15.084

#### **Asia Pacific**

The Asia-Pacific region has a total of 159 startup economies in the global top 1000, slightly declining from 161 in 2021. At the country level, the region is home to an incredibly diverse range of countries, with some home to more than one billion citizens (China and India), and some with high average incomes compared to most countries in the world (such as Australia and Singapore), as well as 19 countries in the global top 100.

The aforementioned ecosystems are indeed some of the strongest in the region due to their sheer size and that of their economies. Within the global top 10 countries, both Singapore (7th) and Australia (8th) managed to improve their rankings compared to last year, while China fell by 3 spots but still retained its position in the global top 10. This year's big news for the region is the fact that China was overtaken by both Singapore and Australia, which now rank 1st and 2rd regionally, pushing China down to 3rd place. Similarly, Japan (20th, up 1 position) overtook South Korea (21st, down 2 positions), replacing it as the region's 5th representative in the global top 20.

Other countries that experienced notable growth are Indonesia (from 45th in 2021 to 38th in 2022) and Mongolia (from 88th to 81st). Kyrgyzstan (100th in the world, making the rankings for the first time) also has reasons to celebrate.

Regional Rank	Country	Number of ranked cities	Global Rank	Rank Change (from 2021)	Total Score
1	Singapore	1	7	+3	23.408
2	Australia	15	8	+1	22.454
3	China	44	10	-3	20.663
4	India	37	19	+1	12.476
5	Japan	11	20	+1	11.947
6	South Korea	5	21	-2	11.626
7	Taiwan	6	25	+1	10.189
8	New Zealand	8	30	+3	8.177
9	Indonesia	5	38	+7	5.586
10	Malaysia	3	42	-2	5.416
11	Thailand	4	53	-3	3.752
12	Vietnam	2	54	+5	3.462
13	Philippines	5	57	-5	3.302
14	Kazakhstan	2	74	+2	0.910
15	Pakistan	3	76	-1	0.717
16	Mongolia	1	81	+7	0.582
17	Sri Lanka	1	90	+2	0.402
18	Bangladesh	1	93	-	0.321
19	Kyrgyzstan	1	100	new	0.258

At the city level, China dominates the regional top 20 with 7 cities, including the 2 highest ranked: Beijing (6th in the world) and Shanghai (7th). India (with 5) and Australia (with 2) are the other countries with more than one city in the regional top 20. Notable performers at the city level, both having increased by 14 spots in the global ranking, are Guangzhou (ranked 51st in the world) and Pune (90th). Yet this analysis cannot be complete without a close examination of some signs of a potential future power shift between China and India. While the top 4 ranked cities in the region remained stable (Beining, Shanghai, Bangalore, and New Delhi), the two Indian cities are climbing up the global rankings, while Beijing decreased by 3 spots to 6th, and Shanghai lost relative power while still maintaining its ranking, simply because the score gap from Bangalore and New Delhi was so big. But the total score gap has shrunk; Shanghai now outperforms Bangalore by 12%, versus 66% in 2021. If this trend continues next year, Bangalore stands to overtake Shanghai as the region's 3rd best ecosystem.

**Top 20 ranked cities** 

Regional Rank	City	Country	Global Rank	Rank Change (from 2021)	Total Score
1	Beijing	China	6	-3	102.695
2	Shanghai	China	7	-	70.617
3	Bangalore	India	8	+2	63.282
4	New Delhi	India	13	+1	43.043
5	Tokyo-Yokohama Area	Japan	15	_	37.490
6	Mumbai	India	17	-1	36.211
7	Shenzhen	China	18	+3	35.101
8	Singapore City	Singapore	22	+3	32.279
9	Seoul	South Korea	25	-2	30.111
10	Hangzhou	China	30	+3	24.846
11	Jakarta	Indonesia	32	+2	24.437
12	Hong Kong	China	36	-4	22.091
13	Sydney	Australia	38	-2	20.490
14	Melbourne	Australia	42	-3	17.142
15	Taipei City	Taiwan	47	-6	14.955
16	Guangzhou	China	51	+14	13.486
17	Chengdu	China	78	+8	8.460
18	Kuala Lumpur	Malaysia	88	-8	8.006
19	Pune	India	90	+14	7.921
20	Hyderabad	India	97	+9	7.633

## **Europe**

The European region has a total of 426 startup economies in the global top 1000 this year, up from 386 in 2021. In the top 100 countries, the continent has 46 startup ecosystems, up from 44 in 2021. Despite these impressive increases, we noted above how the momentum of Europe is not entirely positive. Out of these 46 ranked countries, 20 are experiencing decreases, notably Ukraine (minus 16 spots) and Russia (minus 12 spots) for obvious reasons, but also North Macedonia, Moldova, and Bosnia and Herzegovina, all decreasing by ten spots or more. As for cities, there are massive decreases in the regional top 20, with Moscow falling 20 spots in the global rankings and Zurich losing 11 spots.

The UK and its capital London remain by far the strongest European representatives in both country and city rankings worldwide, forming a tier of their own, with scores way ahead of the rest of the continent. France increased 3 spots in the global rankings and entered the global top 10, while Norway (ranked 24th, up 7 positions) and Iceland (41st, up 14) experienced the most positive momentum on the continent. Andorra and Kosovo entered the top 100 at 89th and 96th, great achievements for countries of their size.

1       United Kingdom       78       2       -       52.555         2       Sweden       21       5       +1       28.502         3       Germany       39       6       -1       25.334         4       France       30       9       +3       20.994         5       The Netherlands       23       11       -       20.505         6       Switzerland       17       12       -4       20.253         7       Estonia       2       13       -       18.243         8       Finland       9       14       -       17.852         9       Ireland       8       15       +3       15.914         10       Spain       39       16       -1       14.481         11       Lithuania       3       17       -1       14.194         12       Denmark       5       18       +4       14.193         13       Belgium       11       22       +1       10.806         14       Norway       9       24       +7       10.209         15       Austria       7       23       +5       10.221	Regional Rank	Country	Number of ranked cities	Global Rank	Rank Change (from 2021)	Total Score
3       Germany       39       6       -1       25.334         4       France       30       9       +3       20.994         5       The Netherlands       23       11       -       20.505         6       Switzerland       17       12       -4       20.253         7       Estonia       2       13       -       18.243         8       Finland       9       14       -       17.852         9       Ireland       8       15       +3       15.914         10       Spain       39       16       -1       14.481         11       Lithuania       3       17       -1       14.194         12       Denmark       5       18       +4       14.193         13       Belgium       11       22       +1       10.806         14       Norway       9       24       +7       10.209         15       Austria       7       23       +5       10.221         16       Portugal       7       28       -1       9.390	1	United Kingdom	78	2	_	52.555
4       France       30       9       +3       20.994         5       The Netherlands       23       11       -       20.505         6       Switzerland       17       12       -4       20.253         7       Estonia       2       13       -       18.243         8       Finland       9       14       -       17.852         9       Ireland       8       15       +3       15.914         10       Spain       39       16       -1       14.481         11       Lithuania       3       17       -1       14.194         12       Denmark       5       18       +4       14.193         13       Belgium       11       22       +1       10.806         14       Norway       9       24       +7       10.209         15       Austria       7       23       +5       10.221         16       Portugal       7       28       -1       9.390	2	Sweden	21	5	+1	28.502
5       The Netherlands       23       11       -       20.505         6       Switzerland       17       12       -4       20.253         7       Estonia       2       13       -       18.243         8       Finland       9       14       -       17.852         9       Ireland       8       15       +3       15.914         10       Spain       39       16       -1       14.481         11       Lithuania       3       17       -1       14.194         12       Denmark       5       18       +4       14.193         13       Belgium       11       22       +1       10.806         14       Norway       9       24       +7       10.209         15       Austria       7       23       +5       10.221         16       Portugal       7       28       -1       9.390	3	Germany	39	6	-1	25.334
6       Switzerland       17       12       -4       20.253         7       Estonia       2       13       -       18.243         8       Finland       9       14       -       17.852         9       Ireland       8       15       +3       15.914         10       Spain       39       16       -1       14.481         11       Lithuania       3       17       -1       14.194         12       Denmark       5       18       +4       14.193         13       Belgium       11       22       +1       10.806         14       Norway       9       24       +7       10.209         15       Austria       7       23       +5       10.221         16       Portugal       7       28       -1       9.390	4	France	30	9	+3	20.994
7       Estonia       2       13       -       18.243         8       Finland       9       14       -       17.852         9       Ireland       8       15       +3       15.914         10       Spain       39       16       -1       14.481         11       Lithuania       3       17       -1       14.194         12       Denmark       5       18       +4       14.193         13       Belgium       11       22       +1       10.806         14       Norway       9       24       +7       10.209         15       Austria       7       23       +5       10.221         16       Portugal       7       28       -1       9.390	5	The Netherlands	23	11	_	20.505
8       Finland       9       14       -       17.852         9       Ireland       8       15       +3       15.914         10       Spain       39       16       -1       14.481         11       Lithuania       3       17       -1       14.194         12       Denmark       5       18       +4       14.193         13       Belgium       11       22       +1       10.806         14       Norway       9       24       +7       10.209         15       Austria       7       23       +5       10.221         16       Portugal       7       28       -1       9.390	6	Switzerland	17	12	-4	20.253
9       Ireland       8       15       +3       15.914         10       Spain       39       16       -1       14.481         11       Lithuania       3       17       -1       14.194         12       Denmark       5       18       +4       14.193         13       Belgium       11       22       +1       10.806         14       Norway       9       24       +7       10.209         15       Austria       7       23       +5       10.221         16       Portugal       7       28       -1       9.390	7	Estonia	2	13	_	18.243
10       Spain       39       16       -1       14.481         11       Lithuania       3       17       -1       14.194         12       Denmark       5       18       +4       14.193         13       Belgium       11       22       +1       10.806         14       Norway       9       24       +7       10.209         15       Austria       7       23       +5       10.221         16       Portugal       7       28       -1       9.390	8	Finland	9	14	-	17.852
11       Lithuania       3       17       -1       14.194         12       Denmark       5       18       +4       14.193         13       Belgium       11       22       +1       10.806         14       Norway       9       24       +7       10.209         15       Austria       7       23       +5       10.221         16       Portugal       7       28       -1       9.390	9	Ireland	8	15	+3	15.914
12       Denmark       5       18       +4       14.193         13       Belgium       11       22       +1       10.806         14       Norway       9       24       +7       10.209         15       Austria       7       23       +5       10.221         16       Portugal       7       28       -1       9.390	10	Spain	39	16	-1	14.481
13       Belgium       11       22       +1       10.806         14       Norway       9       24       +7       10.209         15       Austria       7       23       +5       10.221         16       Portugal       7       28       -1       9.390	11	Lithuania	3	17	-1	14.194
14       Norway       9       24       +7       10.209         15       Austria       7       23       +5       10.221         16       Portugal       7       28       -1       9.390	12	Denmark	5	18	+4	14.193
15       Austria       7       23       +5       10.221         16       Portugal       7       28       -1       9.390	13	Belgium	11	22	+1	10.806
<b>16</b> Portugal 7 28 -1 <b>9.390</b>	14	Norway	9	24	+7	10.209
	15	Austria	7	23	+5	10.221
<b>17</b> Russia 9 29 -12 <b>9.355</b>	16	Portugal	7	28	-1	9.390
	17	Russia	9	29	-12	9.355
<b>18</b> Czechia 4 32 – <b>8.087</b>	18	Czechia	4	32	-	8.087
<b>19</b> Italy 34 31 -2 <b>8.090</b>	19	Italy	34	31	-2	8.090
<b>20</b> Poland 14 33 -3 <b>7.182</b>	20	Poland	14	33	-3	7.182

As for European cities, we observe a difference between East and West. Within Eastern Europe, it comes as no surprise that Moscow and Kyiv dropped in rankings: Moscow now ranks 29th, a drop of 20 positions; and Kyiv dropped 45 positions to 93rd. Two other big Eastern European capitals, Warsaw and Budapest, experienced a strong decline this year: Warsaw dropped by 28 positions to 106th, and Budapest dropped by 33 to 167th. The picture is more optimistic among Western European capitals. London strongly improved its global position to rank 3rd (up 2 spots); Paris joined the world's top 10 at 10th; Dublin entered the top 50 at 46th; and Brussels, Oslo, and Athens showed very good progress. It's worth noting the national variety of the regional top 20. Only the United Kingdom, Germany, and Spain have two cities, and no other country has more than one.

#### **Top 20 ranked cities**

1         London         United Kingdom         3         +2         125.637           2         Paris         France         10         +1         52.877           3         Berlin         Germany         12         +1         48.355           4         Stockholm         Sweden         23         +1         31.273           5         Amsterdam         The Netherlands         27         +2         26.807           6         Moscow         Russia         29         -20         25.082           7         Barcelona         Spain         37         -         20.669           8         Munich         Germany         39         -1         19.652           9         Dublin         Ireland         46         +5         15.049           10         Helsinki         Finland         48         -4         14.795           11         Madrid         Spain         50         -5         14.378           12         Copenhagen         Denmark         53         +8         13.149           13         Brussels         Belgium         59         +13         10.534           14         Manchester<	Regional Rank	City	Country	Global Rank	Rank Change (from 2021)	Total Score
3         Berlin         Germany         12         +1         48.355           4         Stockholm         Sweden         23         +1         31.273           5         Amsterdam         The Netherlands         27         +2         26.807           6         Moscow         Russia         29         -20         25.082           7         Barcelona         Spain         37         -         20.669           8         Munich         Germany         39         -1         19.652           9         Dublin         Ireland         46         +5         15.049           10         Helsinki         Finland         48         -4         14.795           11         Madrid         Spain         50         -5         14.378           12         Copenhagen         Denmark         53         +8         13.149           13         Brussels         Belgium         59         +13         10.534           14         Manchester         United Kingdom         60         +8         10.406           15         Tallinn         Estonia         62         +4         10.301           16         Ca	1	London	<b>United Kingdom</b>	3	+2	125.637
4         Stockholm         Sweden         23         +1         31.273           5         Amsterdam         The Netherlands         27         +2         26.807           6         Moscow         Russia         29         -20         25.082           7         Barcelona         Spain         37         -         20.669           8         Munich         Germany         39         -1         19.652           9         Dublin         Ireland         46         +5         15.049           10         Helsinki         Finland         48         -4         14.795           11         Madrid         Spain         50         -5         14.378           12         Copenhagen         Denmark         53         +8         13.149           13         Brussels         Belgium         59         +13         10.534           14         Manchester         United Kingdom         60         +8         10.406           15         Tallinn         Estonia         62         +4         10.301           16         Cambridge         United Kingdom         63         +13         10.219           17	2	Paris	France	10	+1	52.877
5         Amsterdam         The Netherlands         27         +2         26.807           6         Moscow         Russia         29         -20         25.082           7         Barcelona         Spain         37         -         20.669           8         Munich         Germany         39         -1         19.652           9         Dublin         Ireland         46         +5         15.049           10         Helsinki         Finland         48         -4         14.795           11         Madrid         Spain         50         -5         14.378           12         Copenhagen         Denmark         53         +8         13.149           13         Brussels         Belgium         59         +13         10.534           14         Manchester         United Kingdom         60         +8         10.406           15         Tallinn         Estonia         62         +4         10.301           16         Cambridge         United Kingdom         63         +13         10.219           17         Milan         Italy         65         -9         9.943           18	3	Berlin	Germany	12	+1	48.355
6         Moscow         Russia         29         -20         25.082           7         Barcelona         Spain         37         -         20.669           8         Munich         Germany         39         -1         19.652           9         Dublin         Ireland         46         +5         15.049           10         Helsinki         Finland         48         -4         14.795           11         Madrid         Spain         50         -5         14.378           12         Copenhagen         Denmark         53         +8         13.149           13         Brussels         Belgium         59         +13         10.534           14         Manchester         United Kingdom         60         +8         10.406           15         Tallinn         Estonia         62         +4         10.301           16         Cambridge         United Kingdom         63         +13         10.219           17         Milan         Italy         65         -9         9.943           18         Istanbul         Turkey         66         +3         9.908           19         Zuric	4	Stockholm	Sweden	23	+1	31.273
7         Barcelona         Spain         37         —         20.669           8         Munich         Germany         39         -1         19.652           9         Dublin         Ireland         46         +5         15.049           10         Helsinki         Finland         48         -4         14.795           11         Madrid         Spain         50         -5         14.378           12         Copenhagen         Denmark         53         +8         13.149           13         Brussels         Belgium         59         +13         10.534           14         Manchester         United Kingdom         60         +8         10.406           15         Tallinn         Estonia         62         +4         10.301           16         Cambridge         United Kingdom         63         +13         10.219           17         Milan         Italy         65         -9         9.943           18         Istanbul         Turkey         66         +3         9.908           19         Zurich         Switzerland         68         -11         9.625	5	Amsterdam	The Netherlands	27	+2	26.807
8       Munich       Germany       39       -1       19.652         9       Dublin       Ireland       46       +5       15.049         10       Helsinki       Finland       48       -4       14.795         11       Madrid       Spain       50       -5       14.378         12       Copenhagen       Denmark       53       +8       13.149         13       Brussels       Belgium       59       +13       10.534         14       Manchester       United Kingdom       60       +8       10.406         15       Tallinn       Estonia       62       +4       10.301         16       Cambridge       United Kingdom       63       +13       10.219         17       Milan       Italy       65       -9       9.943         18       Istanbul       Turkey       66       +3       9.908         19       Zurich       Switzerland       68       -11       9.625	6	Moscow	Russia	29	-20	25.082
9         Dublin         Ireland         46         +5         15.049           10         Helsinki         Finland         48         -4         14.795           11         Madrid         Spain         50         -5         14.378           12         Copenhagen         Denmark         53         +8         13.149           13         Brussels         Belgium         59         +13         10.534           14         Manchester         United Kingdom         60         +8         10.406           15         Tallinn         Estonia         62         +4         10.301           16         Cambridge         United Kingdom         63         +13         10.219           17         Milan         Italy         65         -9         9.943           18         Istanbul         Turkey         66         +3         9.908           19         Zurich         Switzerland         68         -11         9.625	7	Barcelona	Spain	37	_	20.669
10         Helsinki         Finland         48         -4         14.795           11         Madrid         Spain         50         -5         14.378           12         Copenhagen         Denmark         53         +8         13.149           13         Brussels         Belgium         59         +13         10.534           14         Manchester         United Kingdom         60         +8         10.406           15         Tallinn         Estonia         62         +4         10.301           16         Cambridge         United Kingdom         63         +13         10.219           17         Milan         Italy         65         -9         9.943           18         Istanbul         Turkey         66         +3         9.908           19         Zurich         Switzerland         68         -11         9.625	8	Munich	Germany	39	-1	19.652
11       Madrid       Spain       50       -5       14.378         12       Copenhagen       Denmark       53       +8       13.149         13       Brussels       Belgium       59       +13       10.534         14       Manchester       United Kingdom       60       +8       10.406         15       Tallinn       Estonia       62       +4       10.301         16       Cambridge       United Kingdom       63       +13       10.219         17       Milan       Italy       65       -9       9.943         18       Istanbul       Turkey       66       +3       9.908         19       Zurich       Switzerland       68       -11       9.625	9	Dublin	Ireland	46	+5	15.049
12         Copenhagen         Denmark         53         +8         13.149           13         Brussels         Belgium         59         +13         10.534           14         Manchester         United Kingdom         60         +8         10.406           15         Tallinn         Estonia         62         +4         10.301           16         Cambridge         United Kingdom         63         +13         10.219           17         Milan         Italy         65         -9         9.943           18         Istanbul         Turkey         66         +3         9.908           19         Zurich         Switzerland         68         -11         9.625	10	Helsinki	Finland	48	-4	14.795
13       Brussels       Belgium       59       +13       10.534         14       Manchester       United Kingdom       60       +8       10.406         15       Tallinn       Estonia       62       +4       10.301         16       Cambridge       United Kingdom       63       +13       10.219         17       Milan       Italy       65       -9       9.943         18       Istanbul       Turkey       66       +3       9.908         19       Zurich       Switzerland       68       -11       9.625	11	Madrid	Spain	50	-5	14.378
14       Manchester       United Kingdom       60       +8       10.406         15       Tallinn       Estonia       62       +4       10.301         16       Cambridge       United Kingdom       63       +13       10.219         17       Milan       Italy       65       -9       9.943         18       Istanbul       Turkey       66       +3       9.908         19       Zurich       Switzerland       68       -11       9.625	12	Copenhagen	Denmark	53	+8	13.149
15       Tallinn       Estonia       62       +4       10.301         16       Cambridge       United Kingdom       63       +13       10.219         17       Milan       Italy       65       -9       9.943         18       Istanbul       Turkey       66       +3       9.908         19       Zurich       Switzerland       68       -11       9.625	13	Brussels	Belgium	59	+13	10.534
16       Cambridge       United Kingdom       63       +13       10.219         17       Milan       Italy       65       -9       9.943         18       Istanbul       Turkey       66       +3       9.908         19       Zurich       Switzerland       68       -11       9.625	14	Manchester	United Kingdom	60	+8	10.406
17       Milan       Italy       65       -9       9.943         18       Istanbul       Turkey       66       +3       9.908         19       Zurich       Switzerland       68       -11       9.625	15	Tallinn	Estonia	62	+4	10.301
18     Istanbul     Turkey     66     +3     9.908       19     Zurich     Switzerland     68     -11     9.625	16	Cambridge	United Kingdom	63	+13	10.219
<b>19</b> Zurich Switzerland 68 -11 <b>9.625</b>	17	Milan	Italy	65	-9	9.943
	18	Istanbul	Turkey	66	+3	9.908
<b>20</b> Vienna Austria 71 +14 <b>9.449</b>	19	Zurich	Switzerland	68	-11	9.625
	20	Vienna	Austria	71	+14	9.449

#### Latin America & Caribbean

The Latin America & Caribbean region has a total of 60 cities represented in the global top 1000, with 11 countries ranking in the global top 100. Six of these countries improved their rankings in 2022, and five of them lost momentum. The highest ranked country is Brazil at 26th, down 2 spots since 2021. The rest of the regional top 5 countries (Chile, Mexico, Argentina and Colombia) have increased by 2 or 3 spots, showing very positive momentum among the strongest players in the region.

Regional Rank	Country	Number of ranked cities	Global Rank	Rank Change (from 2021)	Total Score
1	Brazil	24	26	-2	9.480
2	Chile	3	34	+2	6.589
3	Mexico	11	35	+3	6.021
4	Argentina	4	37	+2	5.674
5	Colombia	4	44	+3	5.357
6	Uruguay	1	56	-5	3.304
7	Peru	1	63	-1	2.052
8	Costa Rica	1	67	+5	1.445
9	Panama	1	78	+5	0.633
10	Ecuador	1	87	-1	0.441
11	Jamaica	0	94	-15	0.317

The regional top 20 cities have seen generally positive results: 12 cities improved their rankings, notably the seven highest ranked, as well as Puebla (ranked 236th in the world, 193 spots up since 2021) and Nassau (newly ranked city that entered straight to the 313th spot globally and 19th regionally). On the other side of the spectrum, cities such as Belo Horizonte, Montevideo, Porto Alegre, and Florianópolis have all lost more than 50 spots. However, only 6 of the region's top 20 dropped in rankings, versus 12 that improved.

Subregions within Latin America & Caribbean performed differently, however. Central America had a good year; All of its ranked countries improved: Mexico, Costa Rica, and Panama. This region is strongly dominated by Mexico, which contributes 14 of the cities in the regional top 20 list. Mexico City had a strong year, solidifying its position in the global top 50 at 44th. The story is more mixed in South America, where three countries climbed up the rankings, and four countries declined. Among cities, the 5 top South American ecosystems improved their rankings, most notably São Paulo (16th) and Bogota (70th), but numerous other cities declined in rankings. The Caribbean subregion had the least positive year. With the Dominican Republic dropping out, Jamaica is the only ranked country, at 94th after a 15 spot drop. Among Caribbean cities, Jamaica's decline is represented by Kingston and Montego Bay being pushed out of the rankings, but three other cities made a debut: Nassau, The Bahamas (313th), George Town, Cayman Islands (397th) and Willemstad, Curaçao (939), bringing the subregion's representation in the global top 1000 to 6 cities.

All in all, the good progress at the top of both the country and city tables paints a positive picture for the region, which is manifested in the optimism prevalent with both entrepreneurs and investors in the region.

**Top 20 ranked cities** 

<b>2</b> Mexico City Mexico 44 +6 <b>15.691</b>	Regional Rank	City	Country	Global Rank	Rank Change (from 2021)	Total Score
3         Buenos Aires         Argentina         56         +4         10.938           4         Santiago         Chile         67         +3         9.708           5         Bogota         Colombia         70         +7         9.467           6         Monterrey         Mexico         139         +10         5.325           7         Curitiba         Brazil         141         +3         5.243           8         Lima         Peru         178         -40         4.563           9         Rio de Janeiro         Brazil         180         -32         4.521           10         Guadalajara         Mexico         202         -46         4.098           11         Medellin         Colombia         205         -22         3.989           12         Belo Horizonte         Brazil         215         -61         3.789           13         Montevideo         Uruguay         218         -53         3.696           14         Puebla         Mexico         236         +193         3.312           15         Porto Alegre         Brazil         240         -52         3.196           16	1	São Paulo	Brazil	16	+4	36.655
4         Santiago         Chile         67         +3         9.708           5         Bogota         Colombia         70         +7         9.467           6         Monterrey         Mexico         139         +10         5.325           7         Curitiba         Brazil         141         +3         5.243           8         Lima         Peru         178         -40         4.563           9         Rio de Janeiro         Brazil         180         -32         4.521           10         Guadalajara         Mexico         202         -46         4.098           11         Medellin         Colombia         205         -22         3.989           12         Belo Horizonte         Brazil         215         -61         3.789           13         Montevideo         Uruguay         218         -53         3.696           14         Puebla         Mexico         236         +193         3.312           15         Porto Alegre         Brazil         240         -52         3.196           16         Cordoba         Argentina         248         +49         2.998           17	2	Mexico City	Mexico	44	+6	15.691
5         Bogota         Colombia         70         +7         9.467           6         Monterrey         Mexico         139         +10         5.325           7         Curitiba         Brazil         141         +3         5.243           8         Lima         Peru         178         -40         4.563           9         Rio de Janeiro         Brazil         180         -32         4.521           10         Guadalajara         Mexico         202         -46         4.098           11         Medellin         Colombia         205         -22         3.989           12         Belo Horizonte         Brazil         215         -61         3.789           13         Montevideo         Uruguay         218         -53         3.696           14         Puebla         Mexico         236         +193         3.312           15         Porto Alegre         Brazil         240         -52         3.196           16         Cordoba         Argentina         248         +49         2.998           17         Cali         Colombia         293         +5         2.214           18	3	Buenos Aires	Argentina	56	+4	10.938
6         Monterrey         Mexico         139         +10         5.325           7         Curitiba         Brazil         141         +3         5.243           8         Lima         Peru         178         -40         4.563           9         Rio de Janeiro         Brazil         180         -32         4.521           10         Guadalajara         Mexico         202         -46         4.098           11         Medellin         Colombia         205         -22         3.989           12         Belo Horizonte         Brazil         215         -61         3.789           13         Montevideo         Uruguay         218         -53         3.696           14         Puebla         Mexico         236         +193         3.312           15         Porto Alegre         Brazil         240         -52         3.196           16         Cordoba         Argentina         248         +49         2.998           17         Cali         Colombia         293         +5         2.214           18         San José         Costa Rica         299         +34         2.043           19 <td>4</td> <td>Santiago</td> <td>Chile</td> <td>67</td> <td>+3</td> <td>9.708</td>	4	Santiago	Chile	67	+3	9.708
7         Curitiba         Brazil         141         +3         5.243           8         Lima         Peru         178         -40         4.563           9         Rio de Janeiro         Brazil         180         -32         4.521           10         Guadalajara         Mexico         202         -46         4.098           11         Medellin         Colombia         205         -22         3.989           12         Belo Horizonte         Brazil         215         -61         3.789           13         Montevideo         Uruguay         218         -53         3.696           14         Puebla         Mexico         236         +193         3.312           15         Porto Alegre         Brazil         240         -52         3.196           16         Cordoba         Argentina         248         +49         2.998           17         Cali         Colombia         293         +5         2.214           18         San José         Costa Rica         299         +34         2.043           19         Nassau         The Bahamas         313         new         1.852	5	Bogota	Colombia	70	+7	9.467
8         Lima         Peru         178         -40         4.563           9         Rio de Janeiro         Brazil         180         -32         4.521           10         Guadalajara         Mexico         202         -46         4.098           11         Medellin         Colombia         205         -22         3.989           12         Belo Horizonte         Brazil         215         -61         3.789           13         Montevideo         Uruguay         218         -53         3.696           14         Puebla         Mexico         236         +193         3.312           15         Porto Alegre         Brazil         240         -52         3.196           16         Cordoba         Argentina         248         +49         2.998           17         Cali         Colombia         293         +5         2.214           18         San José         Costa Rica         299         +34         2.043           19         Nassau         The Bahamas         313         new         1.852	6	Monterrey	Mexico	139	+10	5.325
9       Rio de Janeiro       Brazil       180       -32       4.521         10       Guadalajara       Mexico       202       -46       4.098         11       Medellin       Colombia       205       -22       3.989         12       Belo Horizonte       Brazil       215       -61       3.789         13       Montevideo       Uruguay       218       -53       3.696         14       Puebla       Mexico       236       +193       3.312         15       Porto Alegre       Brazil       240       -52       3.196         16       Cordoba       Argentina       248       +49       2.998         17       Cali       Colombia       293       +5       2.214         18       San José       Costa Rica       299       +34       2.043         19       Nassau       The Bahamas       313       new       1.852	7	Curitiba	Brazil	141	+3	5.243
10       Guadalajara       Mexico       202       -46       4.098         11       Medellin       Colombia       205       -22       3.989         12       Belo Horizonte       Brazil       215       -61       3.789         13       Montevideo       Uruguay       218       -53       3.696         14       Puebla       Mexico       236       +193       3.312         15       Porto Alegre       Brazil       240       -52       3.196         16       Cordoba       Argentina       248       +49       2.998         17       Cali       Colombia       293       +5       2.214         18       San José       Costa Rica       299       +34       2.043         19       Nassau       The Bahamas       313       new       1.852	8	Lima	Peru	178	-40	4.563
11       Medellin       Colombia       205       -22       3.989         12       Belo Horizonte       Brazil       215       -61       3.789         13       Montevideo       Uruguay       218       -53       3.696         14       Puebla       Mexico       236       +193       3.312         15       Porto Alegre       Brazil       240       -52       3.196         16       Cordoba       Argentina       248       +49       2.998         17       Cali       Colombia       293       +5       2.214         18       San José       Costa Rica       299       +34       2.043         19       Nassau       The Bahamas       313       new       1.852	9	Rio de Janeiro	Brazil	180	-32	4.521
12       Belo Horizonte       Brazil       215       -61       3.789         13       Montevideo       Uruguay       218       -53       3.696         14       Puebla       Mexico       236       +193       3.312         15       Porto Alegre       Brazil       240       -52       3.196         16       Cordoba       Argentina       248       +49       2.998         17       Cali       Colombia       293       +5       2.214         18       San José       Costa Rica       299       +34       2.043         19       Nassau       The Bahamas       313       new       1.852	10	Guadalajara	Mexico	202	-46	4.098
13       Montevideo       Uruguay       218       -53       3.696         14       Puebla       Mexico       236       +193       3.312         15       Porto Alegre       Brazil       240       -52       3.196         16       Cordoba       Argentina       248       +49       2.998         17       Cali       Colombia       293       +5       2.214         18       San José       Costa Rica       299       +34       2.043         19       Nassau       The Bahamas       313       new       1.852	11	Medellin	Colombia	205	-22	3.989
14       Puebla       Mexico       236       +193       3.312         15       Porto Alegre       Brazil       240       -52       3.196         16       Cordoba       Argentina       248       +49       2.998         17       Cali       Colombia       293       +5       2.214         18       San José       Costa Rica       299       +34       2.043         19       Nassau       The Bahamas       313       new       1.852	12	Belo Horizonte	Brazil	215	-61	3.789
15       Porto Alegre       Brazil       240       -52       3.196         16       Cordoba       Argentina       248       +49       2.998         17       Cali       Colombia       293       +5       2.214         18       San José       Costa Rica       299       +34       2.043         19       Nassau       The Bahamas       313       new       1.852	13	Montevideo	Uruguay	218	-53	3.696
16       Cordoba       Argentina       248       +49       2.998         17       Cali       Colombia       293       +5       2.214         18       San José       Costa Rica       299       +34       2.043         19       Nassau       The Bahamas       313       new       1.852	14	Puebla	Mexico	236	+193	3.312
17       Cali       Colombia       293       +5       2.214         18       San José       Costa Rica       299       +34       2.043         19       Nassau       The Bahamas       313       new       1.852	15	Porto Alegre	Brazil	240	-52	3.196
18       San José       Costa Rica       299       +34       2.043         19       Nassau       The Bahamas       313       new       1.852	16	Cordoba	Argentina	248	+49	2.998
19 Nassau The Bahamas 313 new 1.852	17	Cali	Colombia	293	+5	2.214
	18	San José	Costa Rica	299	+34	2.043
<b>20</b> Florianopolis Brazil 322 -52 <b>1.742</b>	19	Nassau	The Bahamas	313	new	1.852
·	20	Florianopolis	Brazil	322	-52	1.742

#### Middle East and Africa

The Middle East & Africa region has a total of 57 startup ecosystems represented in the global top 1000 cities ranking, down from 74 in 2021. At the country level, there are 22 startup ecosystems in the region ranked in the top 100, just as in 2021.

Israel remains the main player in the region by a significant margin, being the only country in the top 20 at 3rd in the world. Two countries from the region accompany Israel in the top 50: the United Arab Emirates (27th) and South Africa (49th). But Israel's score is still 379% better than its first contender, the UAE, such that no regional power shifts are expected anytime soon. In the Middle East & Africa region, the best country-level news comes from Morocco (increased 16 spots to 79th in the world), and two countries that we welcome as new entrants to the top 100: Senegal at 92nd and Angola at 97th. The most notable decline comes from Rwanda, which lost 15 spots to rank 84th. Also, Uganda and Ethiopia have fallen below the top 100 threshold.

Regional Rank	Country	Number of ranked cities	Global Rank	Rank Change (from 2021)	Total Score
1	Israel	13	3	_	45.062
2	United Arab Emirates	3	27	-2	9.412
3	South Africa	4	49	-1	4.466
4	Nigeria	3	61	+2	2.145
5	Kenya	2	62	-1	2.101
6	Bahrain	1	64	+2	1.903
7	Egypt	1	65	+5	1.777
8	Jordan	1	66	-2	1.647
9	Mauritius	2	71	+2	1.021
10	Saudi Arabia	4	72	-1	0.943
11	Lebanon	1	77	-3	0.709
12	Morocco	3	79	+16	0.594
13	Cape Verde	1	80	+7	0.583
14	Ghana	1	82	-1	0.581
15	Tunisia	1	83	-1	0.548
16	Rwanda	1	84	-15	0.497
17	Qatar	1	86	-2	0.492
18	Namibia	1	91	+8	0.398
19	Senegal	1	92	+13	0.356
20	Angola	1	97	+18	0.275
21	Somalia	1	98	-4	0.270
22	Kuwait	1	99	-9	0.260

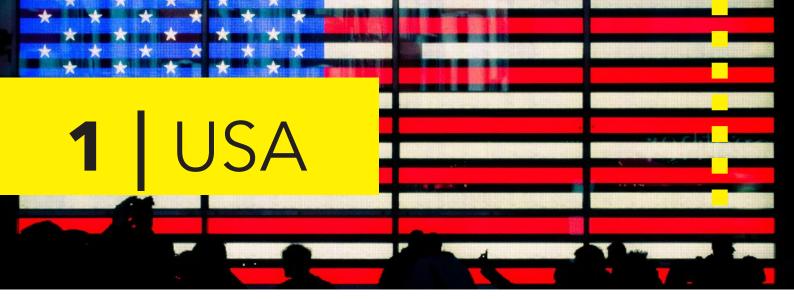
For cities, the most impressive increase comes from Lagos, which joined the world's top 100 club at 81st, up 41 spots. Other relevant increases are lower in the table, but should also be celebrated: Cairo climbed 20 spots to 160th globally, Casablanca climbed 39 spots to 325th, and Caesarea-Or Akiva climbed 181 spots to 340th. The worst momentum in the regional top 20 comes from Jerusalem and Haifa at the top (minus 32 and 25, respectively), while lower in the table Riyadh, Beer Sheva, Jeddah, and Kigali all experienced massive declines, of 62, 73, 91 and 130, respectively.

**Top 20 ranked cities** 

Regional Rank	City	Country	Global Rank	Rank Change (from 2021)	Total Score
1	Tel Aviv Area	Israel	9	-1	54.890
2	Dubai	United Arab Emirates	61	+6	10.328
3	Lagos	Nigeria	81	+41	8.378
4	Jerusalem	Israel	86	-32	8.068
5	Haifa	Israel	144	-25	5.219
6	Cape Town	South Africa	147	-2	5.169
7	Johannesburg	South Africa	158	-6	4.935
8	Cairo	Egypt	160	+20	4.900
9	Nairobi	Kenya	163	-27	4.820
10	Abu Dhabi	United Arab Emirates	171	-2	4.716
11	Amman	Jordan	250	-49	2.958
12	Riyadh	Saudi Arabia	254	-62	2.916
13	Accra	Ghana	296	-15	2.209
14	Yokneam	Israel	308	-24	1.971
15	Beer Sheva	Israel	311	-73	1.900
16	Casablanca	Morocco	325	+39	1.686
17	Manama	Bahrain	329	+8	1.673
18	Caesarea-Or Akiva	Israel	340	new	1.590
19	Jeddah	Saudi Arabia	385	-91	1.281
20	Kigali	Rwanda	395	-130	1.235



**Top 100 Countries Overview** 



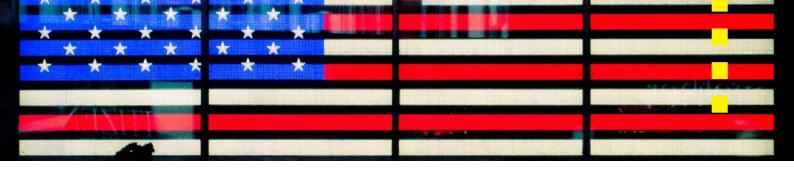
# The US has maintained its dominance on a global scale boasting a substantially higher total score than the rest of the countries.



In fact, the total score of the US is almost 4 times higher than the UK's which is ranked 2nd. This is a showcase of the country's strength and diversity in startup ecosystems. And yet, as other countries are constantly building their startup ecosystems, this score gap between the US and its main contenders keeps shrinking. While in 2021, the US score was 4.3 times better than its first contender, and 4.5 times, 6.3 times and 7.3 times better than the countries ranked 3rd, 4th and 5th respectively, this year these gaps decreased to 3.7, 4.3, 5.5, and 6.9 respectively.

ı	National Rank and Change	City	Global Rank and Change	Total Score	Overperforming Industry	- 1
	1 -	San Francisco Bay	1 -	550.269	Ecommerce & Retail	<b></b>
	2 -	New York	2 -	217.002	Ecommerce & Retail	*
	3 -	Los Angeles Area	4 -	113.855	Ecommerce & Retail	<b>P</b>
	4 -	Boston Area	5 <sup>+1</sup>	108.050	Healthtech	*
	5 -	Seattle	11 +1	51.966	Healthtech	*
	6 -	Chicago	14 +3	40.970	Foodtech	<b>A</b>
	<b>7</b> <sup>+1</sup>	Washington DC Area	19 -	34.963	Energy & Environment	<b>P</b>
	<b>8</b> <sup>-1</sup>	Austin	20 <sup>-2</sup>	32.906	Hardware & IoT	少
	9 -	San Diego	21 +1	32.558	Healthtech	<b>A</b>
	10	Dallas-Fort Worth	26 <sup>+1</sup>	29.353	Transportation	*

For more information about the rankings of cities, view the country dashboard on Startupblink.com.



- The same trend of narrowing gaps is strongly visible with San Francisco, the top global startup ecosystem hub. San Francisco remains the undisputed global leader in innovation, but New York, the world's 2nd highest ranked, is continuing a trend of closing gaps with San Francisco. In 2019, the total score of San Francisco was roughly 5 times higher than New York, in 2020 4 times, in 2021 3 times, and this year it narrowed to 2.5. The same phenomenon of closing gaps with San Francisco is generally happening with other top global ranked cities as well. This is expected, but it is happening at alarming rates, signaling a substantial relative decline in the ecosystem's relative strength. It should be reiterated that San Francisco is still a uniquely strong ecosystem. This is not only shown with the massive total score gap, but also by the diversity of the ecosystem. San Francisco ranks first across all 11 startup industries, with the best performance in Software & Data. Other US cities, headed by New York, Boston and Los Angeles, are also dominant in many industries. Together, US cities exclusively take the top 3 positions in 6 of 11 industries.
- Ranked 2nd in the US and globally, New York formed its own solid and unique global and national tier. Its main contenders London (3rd globally), Los Angeles (4th) and Boston (5th) are not likely to take its position any time soon. Los Angeles and Boston can be regarded as third tier startup ecosystems for the US, with relatively similar total scores. Boston maintains the positive momentum, advancing one spot globally and continues to be strong in Healthtech where the ecosystem is ranked 2nd.

- The top 10 ecosystems in the US had a good year. Four of them maintained their ranking: San Francisco (1st globally), New York (2nd), Los Angeles (4th), and Washington DC (19th). Five of the top 10 US ecosystems improved their global rankings: Boston, Seattle, Chicago, San Diego and Dallas-Fort Worth. Chicago ranks 4th in the world in Foodtech and San Diego occupies the same position in Healthtech. Only one top 10 city, Austin, dropped 2 spots in the Index, ending as 20th worldwide. The top 10 nationally remains almost identical to last year, with the sole exception of Austin which was overtaken by Washington DC. As Boston joined the global top-5 list at the expense of Beijing this year, 4 of the top 5 ecosystems worldwide are in the US.
- Within the top 20 nationally and global top 50, Salt Lake City Provo Area registered a substantial jump of 24 spots to now rank 31st globally. This momentum can be partially explained by our clustering of Salt Lake City with Provo Area.
- More notable increases can be seen for Pittsburgh (ranked 58th globally), Columbus (64th globally), and Kansas City (ranked 69th globally).
- Still in the top 100 cities but registering a significant decrease in the ranking are Charlotte (ranked 73rd), Nashville (ranked 74th), and Las Vegas (ranked 77th).
- This year, Murray debuted in the top 500 and there are several new US cities in the top 1000. The total number of US cities in the top 1000 is lower than last year, with 257 ranked ecosystems, but this is primarily due to clustering, not due to reduced activity.



In fact, we have recorded sizable seed activity in a growing number of smaller US ecosystems, which may enter the top 1000 list in the near future if they continue growing.

Another indication for the US dominance in the global startup scene can be seen by examining the number of US cities ranked in the global top 300. Last year there were 81 such cities. This year, although the top-1000 list includes only 257 US cities versus 267 last year, the US has 90 cities ranked in the top 300.

Overall, the US scores very strongly on Quality. The country now boasts 3 times more unicorns than China and over 6 times more exits, and the growth in the number of such success stories year-over-year is significantly higher than in China. With this year's downward trend in China, it is clear that the US will continue to be the dominant startup ecosystem leader for years to come. However, the gaps are narrowing, and local ecosystem developers should do more than before in the face of growing competition.

# Notable Startups and Ecosystem Champions

#### Reddit

San Francisco, USA Unicorn

Reddit is an online platform that enables users to submit links, create content, and discuss topics of interest.

⇒ Figma Unicorn (€)

San Francisco, USA

Figma is a design platform enabling teams to build products together.

⇒ Epic Games Unicorn

Cary, USA

Epic Games is an interactive entertainment company that develops games and offers its game engine technology to other developers.

#### **Pantheons**

## Apple

San Francisco, USA

Apple designs, develops, and sells consumer electronics, computer software, and online services.

#### Google

San Francisco, USA

Google specializes in internet-related services and products which include online advertising technologies, search engine, and cloud computing.

#### Amazon

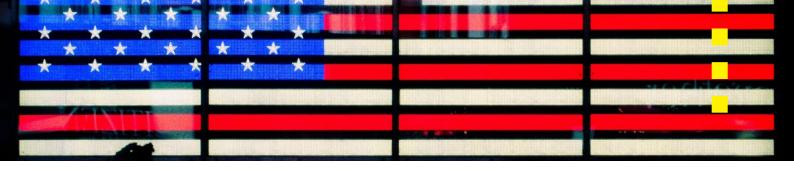
Seattle, USA

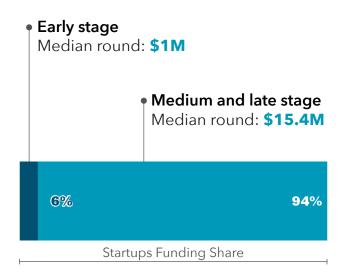
Amazon focuses on Ecommerce, cloud computing, digital streaming, and artificial intelligence.

#### Meta

San Francisco, USA

Previously known as Facebook, Meta is a social media and social networking service company.





# **Startup Ecosystem Overview**

Our current moment has been turbulent and full of monumental changes. However, one constant stays the same: the substantial global influence and dominance of the US startup ecosystem. In order to maintain this unique position as global tech leader, new legislation is being prepared to support strategic industries such as <a href="mailto:semiconductor">semiconductor</a> manufacturing, and to attract talent by issuing visas for foreign entrepreneurs and scientists.

Regarding startup ecosystems, the US is still the land of opportunity, representing the world's most vibrant source of free and disruptive technological creativity. The US version of the internet is global and open, in contrast to more closed systems forming in other parts of the world. US startup ecosystems are leveraged by foreign entrepreneurs who know that the US is the best place to scale and grow a global company. A substantial advantage for attracting foreign entrepreneurs and scaling globally is that English is a globally dominant language.

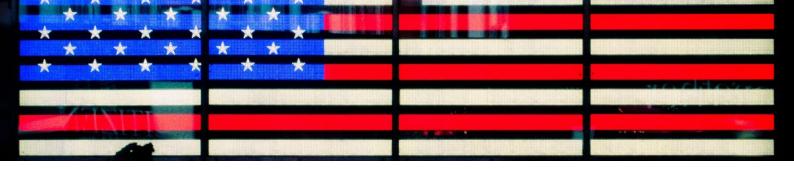
The US version of free-market capitalism focuses on profit and high risk tolerance, and provides startups with opportunities, funding, and support from an ecosystem which is mainly based on the private sector without too much interference from the public sector. This market driven approach to startup development has resulted in the creation of some of the most successful startups in the world.

An example can be found in the country's flexible bankruptcy laws, which allow entrepreneurs to fail and start over easily compared to the financial and reputational consequences such failures have in many other countries.

The US federal system allows states to differentiate themselves, to make sure that when one location is less appealing, alternative hotspots with different priorities will be available.

The top US startup ecosystems offer new companies everything they need: access to funding through a large network of VCs, angel investors, and mentorship in high quality accelerators. Leading universities such as MIT and Stanford provide cutting edge science and an additional magnet for ambitious local and foreign students, who can then move on to build world-leading companies.

As long as the US maintains its mindset of entrepreneurship and risk taking, its ecosystems will continue to thrive and attract ambitious entrepreneurs from around the world.



#### **Our Ecosystem Partners**



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# INVEST PUERTO RICO

#### **Our Report Partners**















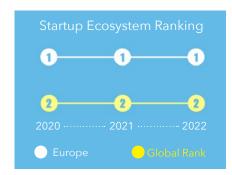




Please refer to the ecosystem case study section to read a <u>detailed analysis of the Pittsburgh Startup Ecosystem.</u>



# London advances in the top 3 as UK strengthens its position.



The United Kingdom is the 2nd most innovative startup ecosystem in the world, and has consolidated this position since 2017. The UK maintains an advantage in front of the 3rd ranked country (Israel), particularly because of a better Quantity Score. While last year the gap in score between the UK and Israel was small, this year the UK managed to open a bigger gap, thereby solidifying its position as 2nd highest ranked country, and reducing the threat of being displaced next year.

The UK excels in its Business score where it is ranked higher than the US, Israel, and Canada, the UK's main contenders.

	National Rank and Change	City	Global Rank and Change	Total Score	Overperforming Industry	
	1 -	London	3 +2	125.637	Fintech	,
	2 -	Manchester	60 +8	10.406	Social & Leisure	, 1
	<b>3</b> <sup>-</sup>	Cambridge	63 <sup>+13</sup>	10.219	Healthtech 🙎	
	4 -	Bristol	94 <sup>-4</sup>	7.806	Software & Data	1
	<b>5</b> <sup>-</sup>	Oxford	95 <sup>-3</sup>	7.704	Healthtech	•
	6 -	Edinburgh	96 <sup>+6</sup>	7.682	Energy &	
	<b>7</b> +6	Leeds	126 <sup>+86</sup>	5.588	Social & Leisure	
	<b>8</b> <sup>-1</sup>	Birmingham	130 <sup>-16</sup>	5.537	Ecommerce & Retail	, 1
	<b>9</b> <sup>+3</sup>	Reading	145 <sup>+63</sup>	5.210		
	<b>10</b> <sup>+1</sup>	Newcastle upon Tyne	148 <sup>+59</sup>	5.166	Ecommerce & Retail	, 1

For more information about the rankings of cities, view the country dashboard on Startupblink.com.



London is the top ranked city in the UK and 3rd globally after surpassing Los Angeles and benefiting from Beijing's decline. It is still the only non-US or Chinese city in the global top 7, and its strong position in Europe is immensely solid: London's score is 137% higher than the score of its first European contender, Paris.

It should come as no surprise that London ranks very high for Fintech, but it also ranks in the global top 5 cities for Marketing & Sales Technology, and Social & Leisure Technology. London is the main innovation hub in the country, as the UK struggles to push another city into the top 50. However, there are 6 UK cities ranked in the global top 100. Only the US and China have more cities than the UK in the global top 100.

Manchester increased by 8 spots since last year, now ranked 60th globally, maintaining its position as the 2nd highest ranked city in the UK. Manchester is followed by Cambridge and Bristol. Cambridge continued its positive momentum from last year, moving up 13 positions to 63th globally and closing the gap on Manchester. The story stands differently for Bristol which dropped 4 spots to 94th globally.

Oxford and Edinburgh preserved their positions as 5th and 6th in the UK, with Oxford slightly decreasing by 3 spots to 95th globally, and Edinburgh breaking into the top 100 with a jump of 6 spots to 96th globally.

Leeds, Reading, and Newcastle upon Tyne have all dramatically increased in rank and entered the UK top 10, with Leeds taking over the 7th place in the UK from Birmingham which decreased in rank by 16 spots to 130th. With a jump of 86 spots, Leeds is now 126th globally, Reading jumped 63 spots to 145th globally, and Newcastle upon Tyne is at 148th with a jump of 59 spots, taking the 10th position nationally.

The UK is also ranked second globally in the total number of cities ranked, which now stands at 78 (34 more than China) with an impressive 23 new entrants in the top 1000. The highest-ranked debut from the UK is Warwick, at 359th globally.

UK policymakers should focus on the major task of making sure that at least one additional UK city takes its place into the global top 50, finally creating a second strong international ecosystem in the UK.

In response to the results of the Index, the UK Minister for Tech and the Digital Economy, Chris Philp, said:

"This report proves we are Europe's undisputed tech powerhouse - producing billion-dollar firms and successful startups across the country and transforming cities every year.

But we aren't complacent and are moving to make sure the UK remains one of the best places in the world to start, scale and attract record levels of investment in tech businesses."

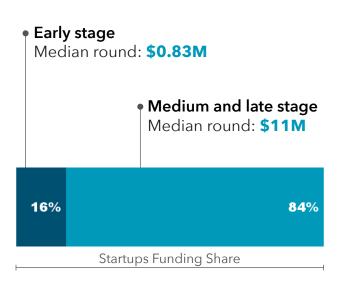


# **Startup Ecosystem Overview**

The United Kingdom has managed to excel in entrepreneurship and science by attracting global talent to its main startup ecosystem, London. With Brexit finalized, there will be an increased challenge to continue doing so, especially for EU entrepreneurs who have flocked to the UK in the past and are responsible for many of its top startups. The UK government is aware of this problem and has launched the **EU Settlement Scheme** as well as an Innovator visa and a Start-up visa to create a path for foreigner entrepreneurs to join the local ecosystem. One could arque countries that are disconnected regionally are able to make fast decisions like a lean startup, which gives hope to future growth prospects of UK startup ecosystems.

The UK is blessed with world class science infrastructure, and relatively small university cities such as Oxford and Cambridge (where the AstraZeneca vaccine was developed) are joining the highly successful fintech hub of London to create a national array of top startup ecosystems. London is one of the world's most successful international cities, making it an extremely attractive location for ambitious entrepreneurs.

With a qualified workforce, top rated universities, pro business environment, and cutting edge innovation, the UK startup ecosystem should continue thriving.





# **Notable Startups and Ecosystem Champions**

#### **⇒** Thought Machine Unicorn (\*)

#### London, United Kingdom

Thought Machine is a fintech company that builds cloud-native technology to revolutionize core banking.

## ⇒ Zopa Unicorn (\*)

London, United Kingdom

Zopa offers peer-to-peer loans with low rates, flexible terms, and no early repayment fees.

## **⇒** Graphcore Unicorn (\*)

#### Bristol, United Kingdom

Graphcore is a developer of semiconductors built for AI and machine learning.

#### **Pantheons**

#### ASOS

#### London, United Kingdom

ASOS is a global online fashion and cosmetic retailer.

#### Revolut

#### London, United Kingdom

Revolut is a 21st century banking alternative designed for a global lifestyle.

#### Skyscanner

#### Edinburgh, United Kingdom

Skyscanner is a flight search engine which allows users to compare various airlines on one platform.

## **Our Ecosystem Partners**





#### **Our Report Partner**





# Israel maintains its rank as 3rd highest ranked country.



The 'Start-up Nation' of Israel has maintained its impressive 3rd position in the Index for the 3rd year in a row. When considering population size, Israel has produced more special entities (such as unicorns and exits) per capita than any other country, even the US.

While the top 5 countries in the Index have remained the same in the last 3 years, the changing gap between their total scores is noteworthy. The gap between Israel and the UK at 2nd has increased compared to last year, revealing

the UK's improved performance. At the same time, the gap in score between Israel and its closest contender, Canada, slightly decreased this year, showing how competitive the global top positions are.

ı	National Rank and Change	City	Global Rank and Change	Total Score	Overperforming Industry	
	1 -	Tel Aviv Area	9 -1	54.890	Marketing & Sales	
	2 -	Jerusalem	86 <sup>-32</sup>	8.068	Software & Data	
	3 -	Haifa	144 <sup>-25</sup>	5.219	Healthtech <b>2</b>	
	<b>4</b> <sup>+1</sup>	Yokneam	308 <sup>-24</sup>	1.971		
	<b>5</b> <sup>-1</sup>	Beer Sheva	311 <sup>-73</sup>	1.900		
	<b>6</b> <sup>+3</sup>	Caesarea-Or Akiva	340 <sup>+181</sup>	1.590		
	<b>7</b> <sup>+3</sup>	Modiin-Maccabim-Reut	511 <sup>+116</sup>	0.702		
	<b>8</b> <sup>+3</sup>	Nazareth	514 <sup>-6</sup>	0.691		
	<b>9</b> <sup>-3</sup>	Ashdod	523 <sup>-64</sup>	0.659		
	<b>10</b> <sup>new</sup>	Yavne	585 <sup>new</sup>	0.630		

For more information about the rankings of cities, view the country dashboard on Startupblink.com.



Overall, Israeli cities have had negative momentum this year. Tel Aviv, the country's undisputed major hub, has dropped by one spot to rank at 9th globally, with Paris (10th) and Seattle (11th) slowly closing the gap to threaten Tel Aviv's position next year. Other Israeli cities have seen a bigger decline, further increasing the gap between them and Tel Aviv. This has resulted in Tel Aviv in consolidating its position as the only global, high-impact ecosystem in the country. Tel Aviv is ranked 5th globally in the Fintech industry, and is also doing well in other industries like Marketing & Sales (6th), Software & Data (6th), and Transportation (9th).

The 2nd highest ranked city in the country, Jerusalem lost 32 positions to rank 86th, still in the global top 100. This has resulted in Dubai displacing Jerusalem at 2nd place in the Middle East.

Among cities in the top 100-1000 range, Haifa has slipped 25 ranks to the 144th position globally. Yokneam and Beer Sheva have decreased by 24 and 73 spots to rank at 308th and 311th respectively. The good news for Yokneam comes at a national level where the ecosystem has increased 1 spot, switching places with Beer Sheva and taking 4th place.

There is also good news for 3rd tier Israeli ecosystems - Caesarea-Or Akiva has improved by a massive 181 places, now ranking at 340th, and Modiin-Maccabim-Reut increased by 116 places to 511th. Yavne has made an impressive debut with a rank of 585th. Ashkelon and Bet Shemesh are two other seed ecosystems that have made a debut this year, and Israel now has 13 cities in the top 1000, an increase of two from last year.

To maintain its position and increase its standing, Israel needs to make sure ecosystems other than Tel Aviv continue to grow, while leveraging Tel Aviv's position as a leading global startup hub to attract more investment. Improving Israel's business score with regulatory reform should be a priority for policy makers.

# **Startup Ecosystem Overview**

Israel is known as the startup nation for a good reason. It is a small country which still manages to leave a substantial mark on the global startup ecosystem. There are several lessons that can be learned from the success story of the Israeli ecosystem.

First, Israel demonstrates that countries can turn a difficult geo-political situation into an advantage. Adverse situations make innovation a necessary strategic advantage for survival. Many innovations were born out of existential necessity in Israel.

Second, recent decades in Israel showcase how startups can transform a low productivity, developing economy into a high efficiency, developed economy. The Israeli startup ecosystem is a cash cow, generating tax revenue for the country both from exits and high salaries.

Instead of universities or corporations, the Israeli army became one of the world's top startup accelerators by accident. It should be noted, however, that the Israeli public sector has done a commendable job of letting startups run loose early, without limitations and restrictions, in contrast to many other countries whose ecosystems are riddled with bureaucracy and regulation.



Further, the Israel Innovation Authority has offered interesting programs over the years to support local entrepreneurs.

Israeli apps like Waze, Wix, Fiverr, and Viber have made their mark around the world, but a few, like Mobileye (sold to Intel for US \$15 billion), are the hidden powerhouses within the ecosystem.

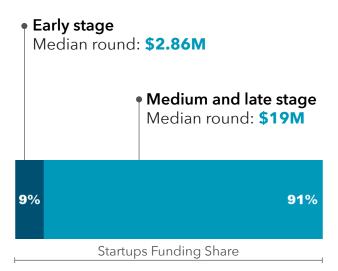
There are a wide variety of industries where Israel excels, including autonomous driving (Mobileye, Waze), advertising (Taboola), and services (Fiverr). One maturing industry that shows substantial potential is cybersecurity, leveraging the unique challenges the Israeli army faces.

However, the Israeli ecosystem should serve as an inspiration and not a blueprint. The adverse and unique conditions of Israel do not exist in most other countries. Israel is also trailing on policy, regulation, and infrastructure. Fintech is broken in Israel, where Stripe and Revolut are not operating. Nevertheless, fintech companies such as Payoneer, EToro, and Lemonade thrive by focusing on international markets. UBER doesn't operate in Israel, and the public transport system is notoriously inefficient, yet automotive startups such as Moovit and Mobileye secured exits at astonishing valuations.

The rising cost of living in Tel Aviv and the presence of global companies such as Microsoft, Intel, and Google make it challenging for startups to find affordable talent. This shortage of tech talent and a high cost of living present real challenges for Israeli startups.

One issue of critical concern to the Israeli ecosystem is brain gain and brain drain. Firstly, there is a clear lack of brain gain. Unlike other top-ranked global startup ecosystems, the Israeli ecosystem fails to attract substantial numbers of foreign talent. The ecosystem cannot rely solely on native founders if it wishes to close the gap with international hubs such as San Francisco and London. But brain drain is also increasingly important. Dozens of Israeli unicorn founders have built and established their companies in other startup ecosystems, mainly the US.

The way we see it, Israel relies on an important secret ingredient: the quality and mindset of its entrepreneurs. As long as the country manages to keep them happy, the Israeli ecosystem should continue to thrive.





# **Notable Startups and Ecosystem Champions**

⇒ Wiz Unicorn

Tel-Aviv Yafo, Israel

Wiz is a cybersecurity startup that allows companies to address security issues in a public cloud infrastructure.

⇒ Moon Active Unicorn 

(\*)

Tel-Aviv Yafo, Israel

Moon Active is a game development company focused on iOS, Android, and Facebook games.

⇒ Lightricks Unicorn

Jerusalem, Israel

Lightricks develops mobile video and photo editing apps.

#### **Pantheons**

**⇒** Wix

Tel Aviv-Yafo, Israel

Wix is a platform for the development of cloud data services.

#### Mobileye

Jerusalem, Israel

Mobileye, acquired by the Intel Corporation in 2017, develops vision-based driver-assistance systems.

Waze

Tel Aviv-Yafo, Israel

Waze is a mobile navigation app that enables drivers to use live maps and get real-time traffic and road updates.

#### **Our Ecosystem Partner**



#### **Our Report Partner**

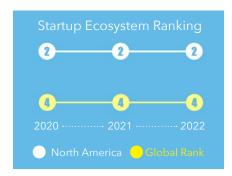




Please refer to the ecosystem case study section to read a detailed analysis of the Yokneam's Startup Ecosystem.



# Canada maintains its position for the third year in a row.



Canada's rank at 4th globally remains unchanged, showing strong and solid performance. But don't let the unchanged rank fool you: Canada is experiencing significant momentum.

Its closest index competitor, Israel, is still ranked higher because of a superior Quality score. But the gap between the Quality scores of the two countries is decreasing, resulting in a shrinking gap between overall scores. If Canada continues its positive momentum, it will soon threaten Israel's position as the world's 3rd best ecosystem.

	National Rank and Change	City	Global Rank and Change	Total Score	Overperforming Industry	
	1 -	Toronto	24 +2	31.266	Marketing & Sales	E
	2 -	Vancouver	40 +2	18.880	Energy & Environment	
	3 -	Montreal	45 <sup>+1</sup>	15.084	Foodtech	
	4 -	Ottawa	89 -	7.943	Ecommerce & Retail	<b>E</b>
	5 -	Kitchener Waterloo	91 <sup>+10</sup>	7.916	Edtech	le le
	6 -	Calgary	104 <sup>+12</sup>	6.997	Energy & Environment	
	<b>7</b> <sup>+1</sup>	Edmonton	140 <sup>-14</sup>	5.306	Energy & Environment	<b>Y</b>
	<b>8</b> <sup>-1</sup>	Quebec City	142 <sup>-17</sup>	5.239	Social & Leisure	女
	9 -	Kingston	183 <sup>-42</sup>	4.495	Energy & Environment	R. C.
	10	Victoria	184 <sup>+9</sup>	4.490		

For more information about the rankings of cities, view the country dashboard on Startupblink.com.



Among Canada's top startup ecosystems, we can see an improvement in rankings. Five of Canada's top 6 ecosystems improved their rankings in 2022, and the sixth (Ottawa) maintained the same ranking as in 2021.

Toronto, the only top 30 global startup ecosystem in Canada, and Vancouver both advanced by 2 spots each to rank 24th and 40th. Toronto excels in Marketing & Sales where it is ranked 13th, while Vancouver advanced substantially in Energy & Environment to rank 6th in the world, the only city in Canada to reach the top 10 of any industry. Montreal improved by one spot to rank 45th in the world. Canada managed a remarkable achievement: 3 cities included in the top 50 of the Index. This has only been achieved by 3 vastly more populated countries: the United States, China, and India. This is proof that Canada has built a national ecosystem with a few very strong centers of power.

In the top 100, Canada boasts two more cities: Ottawa ranks 89th and Kitchener Waterloo ranks 91st, up 10 places. Also, Ranked 104th, Calgary registered a jump of 12 spots.

Edmonton switched places with Quebec City in the national rankings, declining by 14 spots to rank 7th nationally and 140th globally, after Quebec City decreased by 17 spots to rank 142nd globally. The startup ecosystem of Kingston maintained its 9th national rank, but lost 42 spots globally and ranks 183rd.

A notable increase in momentum is seen for Victoria, now in the top global 200 after a 9 spot increase in ranking. Also in the 200, Winnipeg had an impressive jump of 70 spots to rank 192. We also congratulate Charlottetown for its great momentum, advancing 134 spots in the Index to rank 495th worldwide and 20th in Canada.

There are a number of debuts to welcome in the Index. The most notable debuts are Guelph (ranked 536th), Saint Catharines, and Cornwall, among many others. With these new additions, Canada now has 41 cities in the top 1000, versus only 30 ranked cities in 2021, indicating the strength and variety of the Canadian startup scene.

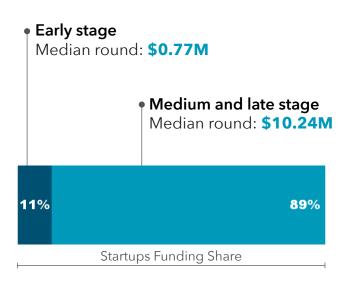
# **Startup Ecosystem Overview**

Canada's startup scene has massive potential. Considering the active approach by its efficient public sector to develop startup ecosystems, and a relative abundance of resources, there is no reason Canada should not take an even more substantial role in producing massive global hubs. For this to happen, there will have to be more Canadian startups with global impact, like those built in the neighboring United States. The climate for entrepreneurship in Canada looks more promising than ever with attractive incentives like the Startup Visa, tax breaks, and major Venture Capital investment.

Two examples tell a powerful story of Canada's opportunities and challenges. The first is Slack. Originally a Vancouver based startup, Slack is now headquartered and operating in Canada's neighbor and competitor, the US. The second is Shopify, an e-commerce platform behemoth founded in Ottawa and built by a German immigrant founder.



The lessons to draw here are that Canada should continue to make sure its most talented entrepreneurs remain in the country while also working on attracting high quality foreign talent. The marketoriented economic system, high standard of living, native English language, and proximity to the US all make the country attractive to foreign talent. As evidence of vibrant startup ecosystems, Canada has dozens of startups lined up to become unicorns. With resounding success stories like Shopify and the global recognition provided by initiatives like the Collision Conference, Canada's startup ecosystems are raising the bar.



# Notable Startups and Ecosystem Champions

→ Dapper Labs Unicorn (€)

Vancouver, Canada

Dapper Labs is a consumer-focused flow blockchain product that uses NFTs to bring games and entertainment to fans in a digital age.

→ 1 Password Unicorn

Toronto, Canada

1Password is a secure and convenient password manager for documents, credit card information, and addresses.

→ Trulioo Unicorn

Vancouver, Canada

Trulioo provides a global identity verification solution using advanced analytics.

#### **Pantheons**

#### **Collision Conference**

Toronto, Canda

Collision is considered one of the world's leading tech conferences, bringing together entrepreneurs and companies from around the world.

Shopify

Ottawa, Canada

Shopify is a global e-commerce platform empowering merchants to sell their products.



Please refer to the ecosystem case study section to read a <u>detailed analysis of the Kingston's and Edmonton's Startup Ecosystem</u>



#### **Our Ecosystem Partners**









#### **Our Report Partners**







Agence de promotion économique du Canada atlantique

# 5 | Sweden

# Sweden is the top startup economy in the EU.



After advancing one spot in the global Index, Sweden has become the highest ranked country in the EU, displacing Germany. Sweden is now the 5th ranked startup economy in the world, continuing last year's ascension. This achievement can be explained by the improved Quality score produced by higher impact startups. Another reason for celebration is Sweden's Business Score, now ranked 1st in the world and displacing the United States.

Stockholm slightly improved its position within the highly competitive top 25 after an increase of one spot to rank

23rd. The capital is ranked 3rd in the EU and faces the challenge of closing gaps with Paris and Berlin. Stockholm's startup ecosystem ranks in the top 30 for 6 industries, which is an impressive achievement.

ı	National Rank and Change	City	Global Rank and Change	Total Score	Overperforming Industry
	1 -	Stockholm	23 +1	31.273	Social & Leisure
	2 -	Malmö	118 <sup>+19</sup>	6.105	Ecommerce & Retail
	<b>3</b> <sup>-</sup>	Gothenburg	165 <sup>+6</sup>	4.812	Energy & street & str
	<b>4</b> <sup>+1</sup>	Uppsala	206 <sup>+210</sup>	3.981	Ecommerce & Retail
	<b>5</b> <sup>-1</sup>	Lund	290 <sup>+28</sup>	2.229	
	6 -	Linkoping	505	0.721	
	<b>7</b> <sup>+1</sup>	Helsingborg	604 <sup>-32</sup>	0.500	
	<b>8</b> <sup>-1</sup>	Vasteras	673 <sup>-131</sup>	0.414	
	<b>9</b> new	Boras	719 <sup>new</sup>	0.352	
	<b>10</b> <sup>new</sup>	Umea	730 <sup>new</sup>	0.336	

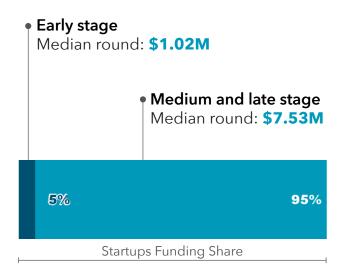
For more information about the rankings of cities, view the country dashboard on Startupblink.com.



It overperforms primarily in Social & Leisure where it is ranked 6th after a 2 place increase.

All of Sweden's second tier cities performed extremely well this year. The country now has five cities in the top 300, versus three last year. Malmö increased 19 spots to rank 118th and Gothenburg increased by 6 spots to rank 165th. However, we particularly congratulate the meteoric jump of Uppsala which increased 210 places and ranks 206th. On the national level, Uppsala displaced Lund, although the ecosystem still had a good year globally, advancing 28 spots and ranking 290th globally.

Below the rank of 500 and in the top 1000, Sweden improved its number of seed startup ecosystems by adding new cities such as Boras, Umea, and Örebro. This brings the total number of startup ecosystems in the top 1000 to 21, an immense increase compared to only 10 ranked cities in 2021. This growth - if it remains sustainable in the upcoming years - demonstrates that the Swedish startup scene is reaching a new level of maturity.



To close gaps with Canada, Sweden should keep developing more seed activity and improve its Quantity score. In addition, while we congratulate more cities entering the top 500, it is important for Sweden to try and bring more cities in the top 100 as well.

# **Startup Ecosystem Overview**

Sweden's startup ecosystem capitalizes on the country's unique advantages, such as its high quality of life, gender equality, strong business climate, and global competitiveness.

Historically, Swedish entrepreneurs have built extremely high-quality global startups like Spotify, Minecraft, Klarna, and King. These are achievements very few European ecosystems have so far matched, signaling Sweden's ability to become a leader of tech innovation in Europe.

Considering its population of around 10 million, Sweden manages to show that smaller countries can create massive impact. The success of the Swedish startup ecosystem is attracting new funding options, as investors and VC firms are increasing capital availability in anticipation of future unicorns.

Since Stockholm frequently produces successful startups, the mindset of regional entrepreneurs has changed from local to global. Ubiquitous high speed internet connectivity, good knowledge of English, and public sector support make it easier for Swedish entrepreneurs to focus globally.

Support for the startup scene is reflected in the number of events, coworking spaces, and accelerators in Sweden, as well as Sweden Demo Day, which is



organized by Startup Sweden and brings together startups, investors, and corporations. One of the challenges standing in the way of growth is the high cost of living in Sweden, making it harder for startups to consider relocation unless they receive investment in an initial phase. For the Swedish startup ecosystem to remain globally competitive, the country is taking steps in attracting and maintaining international talent. Initiatives such as the Sweden Self-Employment Residency Program enable potential entrepreneurs to start a business in Sweden while also giving them free access to higher education and a number of other benefits. In response to the results of the Index, the Director of Business and External Relations at the City of Malmö, Micael Nord, said:

"All the Swedish cities in the top 500 are increasing and Malmö specifically is ranked 118th globally and 2nd nationally which is a noticeable jump compared to last year. Thanks to the fantastic, creative and innovative startup scene in the city, Malmö has climbed 19 spots and has the potential to be ranked in the top 100 ecosystems next year."

In response to the results of the Index, Axel Josefson, Chairman of the municipal board, Gothenburg alternative Mayor of Gothenburg, said:

"Gothenburg is a sparkling Powerhouse for innovation, a sustainability frontrunner and one of Europe's fastest growing regions. Now we are adding on a thriving platform for scalable tech startups. Welcome to join us!"

# **Notable Startups and Ecosystem Champions**



#### Stockholm, Sweden

KRY is transforming the world of healthcare by making it more accessible and convenient.



#### Stockholm, Sweden

Voi is a micro-mobility startup that provides electric scooters for transportation.

⇒ Einride Unicorn (\*)



#### Stockholm, Sweden

Einride is a technology company that develops and provides freight mobility solutions based on electric and autonomous vehicles, leading the transition to sustainable transport.

#### **Pantheons**

#### Spotify

#### Stockholm, Sweden

Spotify is a digital music, podcast, and video service that gives access to millions of songs and other content from creators all over the world.

#### Soundcloud

#### Stockholm, Sweden

Soundcloud is a social sound platform where people can create and share sounds.

#### Klarna

#### Stockholm, Sweden

Klarna is an e-commerce payment solutions platform for merchants and shoppers.



## **Our Ecosystem Partners**







Please refer to the ecosystem case study section to read a <u>detailed analysis of the Gothenburg Startup Ecosystem</u>.



# Berlin remains the EU's the 2nd highest ranked startup ecosystem despite Germany's slight loss in momentum.



Germany has registered a slight decrease of 1 spot, ranking 6th in the world and 2nd in the EU region, losing the regional seniority to Sweden. Despite the overall loss in momentum, Berlin, the country's leading startup ecosystem, is getting closer to entering the global top 10 after increasing one spot this year. The Berlin startup ecosystem is now ranked 12th in the world and 2nd in the EU. In addition, Berlin became 5th in the world in Energy & Environment after advancing 5 positions. On the other hand, Munich, Germany's 2nd ranked ecosystem, had a

slight decrease of 1 point and now ranks 39th in the world. Munich also lost 4 spots in its best ranked industry, Transportation, where it is now ranked 18th in the world. With these 2 cities in the top 40, Germany enjoys a strong and unique position.

ı	National Rank and Change	City	Global Rank and Change	Total Score	Overperforming Industry
	1 -	Berlin	12 <sup>+1</sup>	48.355	Energy & Environment
	2 -	Munich	39 <sup>-1</sup>	19.652	Transportation 🕦
	3 -	Hamburg	75 <sup>-11</sup>	9.078	Fintech
	<b>4</b> +2	Cologne	135 <sup>-8</sup>	5.386	Edtech
	<b>5</b> <sup>-1</sup>	Frankfurt	146 <sup>-49</sup>	5.202	Fintech
	<b>6</b> <sup>+1</sup>	Rhine-Neckar Area	152 <sup>-22</sup>	5.059	Software & Data
	<b>7</b> <sup>-2</sup>	Stuttgart	168 <sup>-60</sup>	4.780	Hardware & IoT
	<b>8</b> <sup>+2</sup>	Mainz	199 <sup>-18</sup>	4.213	
	<b>9</b> <sup>+12</sup>	Dortmund	204 <sup>+182</sup>	3.991	
	<b>10</b> <sup>+1</sup>	Dusseldorf	214 <sup>-20</sup>	3.814	



While most of Germany's 2nd and 3rd tier cities lost rank, there was a notable jump of 182 places for Dortmund, now ranked 204th in the world and 9th in Germany.

Munster and Chemnitz also had a great year, advancing 109 spots and 80 spots respectively and entering the top 250. In addition, Magdeburg increased 9 points globally and 3 points nationally to rank 30th in Germany.

Some of the most notable losses for Germany's startup scene include Frankfurt dropping from the top 100 list after a decrease of 49 spots.

Notable improvements among German cities in the 2nd half of the Index were booked in Kiel, now ranked 572nd, up 106 positions, and in Duisburg, ranked 666th and up 222 positions. On the other hand, Wurzburg (808th) and Wiedbaden (822nd) dropped 220 and 191 spots respectively.

Overall, Germany has 39 ranked ecosystems, which puts the country in 5th position worldwide in terms of the number of ranked cities in the world's top 1000.

In response to the results of the Index, the Senator for Economics, Energy and Public Enterprises of the state of Berlin, Stephan Schwarz, said:

"Berlin is the city of startups - and a key destination for talent and investment from around the world. Our city boasts an ever unfolding ecosystem paired with the spirit of openness and a strong welcome culture. Berlin is the right place for ideas, for growth and for sustainable development. Be part of it!"

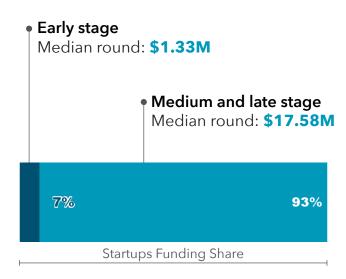
### **Startup Ecosystem Overview**

The German startup scene is characterized by the country's federal structure which gives more power and independence to German states, fostering development of a non-centric startup ecosystem. The diversity of the German startup scene can be seen in some of its notable startups and in its two startup hubs, Berlin and Munich. In Berlin, N26 has been established as a successful fintech startup while TIER is focusing on micromobility. In Munich, the focus is on B2B startups and hardware & IoT. Germany has a tradition of producing global scale, high quality corporations like SAP, Siemens, and Bosch. All of these companies are funding initiatives within the German national startup ecosystem as part of their open innovation activities. During the COVID-19 pandemic, Germany demonstrated its deep science infrastructure, with BioNtech creating one of the world's most sought after vaccines, now commercialized by Pfizer.

Germany's strength and diversity are also reflected in the quality of seed startup ecosystems. Organizations such as ruhrHUB or the City of Magdeburg are actively involved in developing their city's startup ecosystems.

In terms of funding, the public sector offers a diversified support system for startups. For instance, the EXIST grants for starting a business and easing development costs, High-Tech Gründerfonds (HTGF) for seed investment, and Gründung innovativ to help startups during the first years of operations.





German based entrepreneurs also have the advantage of creating solutions for their local economy, which is much bigger than any other country in Europe, while also leveraging Germany's EU leadership position to connect with other markets.

However, there is still work to be done in removing red tape and simplifying tax laws that negatively affect the potential growth of German startup ecosystems. While Germany has a skilled workforce, the high cost of labor and protection laws for employees might be a drawback for startup founders.

## Notable Startups and Ecosystem Champions

⇒ N26 Unicorn (€

Berlin, Germany

N26 offers mobile banking solutions to customers in Europe.

→ Personio Unicorn (\*)

Munich, Germany

Personio is a developer of an HR management and recruiting platform for SMEs and startups.

⇒ IER Mobility Unicorn (\*)

Berlin, Germany

TIER Mobility is an electric scooter company that aims to provide sustainable, ride-sharing solutions to its customers.

### **Pantheons**

### Statista

Hamburg, Germany

Statista is a database company specializing in market and consumer data.

### BioNTech

Mainz, Germany

BioNTech is a biopharmaceutical company pioneering the development of individualized therapies for cancer and other diseases.

Bosch

Stuttgart, Germany

Bosch is a German multinational engineering and technology company.



### **Our Ecosystem Partners**





Senate Department for Economics, Energy and Public Enterprises

### **Our Report Partners**









### Singapore overtakes China as first in the Asia Pacific region.



Singapore has had another great year, and has seen the greatest increase among last year's top 10 countries. After jumping 3 spots, the country is now 7th globally and has overtaken China as the highest ranked country in the Asia Pacific region. Singapore's achievement becomes even greater when examining its score. Last year, China's score was 10% higher than Singapore's. In 2022, Singapore not only closed this gap; Singapore's score is now an impressive 13% higher than China. What the country lacks in Quantity is compensated by stellar achievements in Quality. Considering Singapore's population, its startup scene is 2nd only to Israel.

An interesting note about Singapore is its Business score, which ranks 47th globally. A similar (though milder) situation with low Business score exists in Israel.

Singapore City also had great results this year and the ecosystem advanced by three spots in the competitive cities segment of the top 30 to rank 22nd in the world. The gap in scores between Singapore City, San Diego (ranked 21st), and Austin (ranked 20th, with declining momentum) is very small, and Singapore City is likely to be a serious contender in the global top 20 next year.

Singapore City ranks well in Fintech at 10th in the world. After this year's jump, Singapore City is in the top 30 in a number of industries, including Edtech and Ecommerce & Retail. In the Asia Pacific region, Singapore City is ranked 8th, and is in the same regional tier as Shenzhen and Mumbai (ranked higher) and Seoul (ranked lower).

National Rank and Change	City	Global Rank and Change	Total Score	Overperforming Industry	
1 -	Singapore City	22 +3	32.279	Fintech	



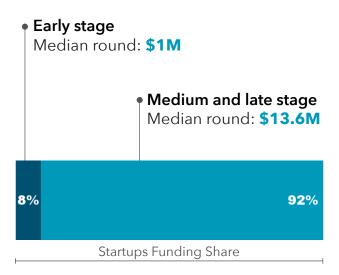
### **Startup Ecosystem Overview**

Singapore is a model for innovation and continues the pattern of a relatively small country massively over-performing and creating regional impact as an open and powerful Asian hub. Singapore's favorable tax legislation and ease of doing business are attracting massive ecosystem investment. It is no wonder that the country keeps on producing billion dollar valuations for its startups. The dominance of Grab is a great example of how Singapore is becoming the headquarters of Asian activities for leading startups.

The Singapore ecosystem boasts a growing number of accelerators and support networks. For instance, Enterprise Singapore has accelerator programs that allow early stage startups to access financial aid and business loans, while initiatives such as Startup SG promote Singapore's startup ecosystem. On top of this, the country's universities are involved in the startup scene, not only by training a highly qualified workforce for the R&D sector, but also in connecting programs to startups and encouraging entrepreneurship on campuses.

Because Singapore has a small market and population, its ecosystem's growth depends on scaling overseas. This aspect gives the ecosystem a unique global perspective from the start and helps the country position itself as a regional hub.

Singapore's public sector is highly supportive of the startup ecosystem, but the country should be careful not to turn this support into a dependency. Moreover, attracting talent and maintaining competitiveness on a global scale should also be focal points for Singapore. Initiatives such as the Entrepreneur Pass (EntrePass) could become instrumental in keeping up with the high demand for a qualified workforce. Considering the country's stability and infrastructure, it is no wonder that Singapore has become a regional entry point for expansion to the Asian market.





# Notable Startups and Ecosystem Champions

→ Moglix Unicorn (\*)

Singapore City, Singapore

Moglix is an online marketplace for business supplies and industrial equipment.

**○ Coda Payments** Unicorn (€)

Singapore City, Singapore

Coda Payments helps digital content providers monetize their products and services.

**⇒ Carousell** Unicorn **(\*** 

Singapore City, Singapore

Carousell is a classifieds marketplace that allows people to buy and sell preloved items.

### **Pantheons**

**Grab**

Singapore City, Singapore

Grab is an application that provides transportation, logistics, and financial services.

Singtel

Singapore City, Singapore

Singtel is a telecommunications company that provides ISP, IPTV, mobile phone, and fixed line telephony services.

### **Our Ecosystem Partners**





**Our Report Partner** 





Please refer to the case study section to read a <u>detailed analysis of Singapore</u> <u>City's startup ecosystem.</u>



# Australia recovered its momentum and overtakes China in the global top 10.



Australia has experienced a mild recovery after last year's decrease. The country is now ranked 8th in the world, consolidating its position in the top 10, and overtaking China. Australia registered a notable increase in the Business score, where it is now ranked 6th in the world.

Australia maintained its country rank at 2nd in the Asia Pacific region, however no single Australian city is ranked in the regional top 10. Sydney and Melbourne, ranked 13th and 14th regionally, are the main Aussie contenders for this list.

At a national level, the top two startup ecosystems, Sydney and Melbourne, are relatively stable, and despite their rankings dropping by 2 and 3 spots respectively, they remain in the global top 50. On the industry level, Sydney excels in Software & Data where it ranks 23rd globally, while Melbourne rose to the 4th position in Energy & Environment.

National Rank and Change	City	Global Rank and Change	Total Score	Overperforming Industry
1 -	Sydney	38 <sup>-2</sup>	20.490	Software & Data
2 -	Melbourne	42 <sup>-3</sup>	17.142	Energy & Environment
<b>3</b> <sup>-</sup>	Brisbane	101 <sup>+11</sup>	7.151	Transportation <b>y</b>
4 -	Perth	166 <sup>+9</sup>	4.810	Energy & Environment
<b>5</b> <sup>-</sup>	Adelaide	239 <sup>-41</sup>	3.248	
6 -	Sunshine Coast	243 <sup>+6</sup>	3.118	Energy & British Environment
7 -	Canberra	355 <sup>-86</sup>	1.495	
8 -	Gold Coast	367 <sup>-91</sup>	1.414	



Brisbane, Perth and Sunshine Coast have pulled the national rankings up this year. Brisbane advanced by 11 spots and ranks 101st in the world, getting closer to the world's top 100. Perth increased by 9 spots to rank 166th while Sunshine Coast increased by 6 places and consolidated its position in the global top 300.

Adelaide, Canberra, and the Gold Coast lost momentum in the Index but maintained their position nationally. In addition, we would like to congratulate Adelaide for entering the Healthtech rankings for the first time.

Despite Australia's overall increase in rankings, the country has only 8 cities in the global top 500 compared to 10 last year. On the other hand, with the debuts of Byron Bay, Geelong and Launceston, the country has a total of 15 ranked startup ecosystems in the top 1000, versus 12 last year.

Australia will need to continue building momentum to completely recover from its ongoing decline in rankings. While the country does relatively well in the Quantity and Business score, more attention should be paid to creating higher impact startups, allowing Australia to challenge Singapore and keep away its closest contender, France.

### Startup Ecosystem Overview

Australia has a solid startup ecosystem, with a few of the country's startups becoming well known global brands, such as Canva and Atlassian. Investment in the startup scene is growing: 2021 was a

record year and 2022 seems to continue this trend. Considering how fast other nations are developing their startup hubs, Australia needs this influx of funding for more inspiring startups to scale globally.

While the country has a fairly small population considering the country's geographical size, the consumer market is growing; on top of this, Australia manages to attract people from overseas both as tourists and as residents. Australia enjoys a smart and proactive approach from its federal and state governments, both supporting the growth of its startup ecosystems. For instance, Australia now offers a Provisional visa for Business Innovation and Investment, a measure that will allow startup entrepreneurs to stay in the country for up to 5 years. Another advantage we have witnessed in Australia is the direct involvement of universities as active stakeholders in the development of the city ecosystems, which adds to the inertia of creating an entrepreneurial culture and forges connections that improve funding and opportunities for startups.

The time zone difference and the traveling time between Australia and the United States and Europe creates challenges for partnerships, sales teams, and integrated remote teams. On the other hand, opportunities are coming in from Asian markets which operate within similar time zones and are in relatively close proximity. All in all, Australia has several factors that make a thriving startup scene: a talented and educated workforce, investment, and an entrepreneurial spirit.



### **Notable Startups and Ecosystem Champions**

### ⇒ Immutable Unicorn (\*)



### Sydney, Australia

Immutable provides a blockchain infrastructure that transforms digital asset ownership in the video-gaming industry.

### **⇒ Airwallex** Unicorn (\*)



### Melbourne, Australia

Airwallex is a financial services platform committed to building global financial infrastructure to scale the digital economy.

### ⇒ Linktree Unicorn (\*)



### Melbourne, Australia

Linktree provides a platform that makes users' online content more discoverable and easier to manage.

### **Pantheons**

### Canva

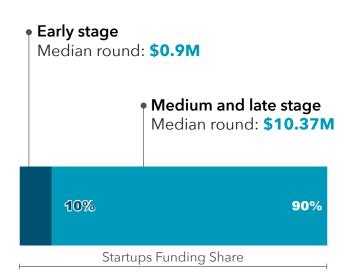
### Sydney, Australia

Canva is an online design and publishing platform that provides user-friendly tools for non-designers.

### Atlassian

### Sydney, Australia

Atlassian provides collaboration, development, and issue tracking software for teams.



### **Our Ecosystem Partners**







### **Our Report Partners**







Please refer to the case study section to read a <u>detailed analysis of Sunshine</u> Coast's startup ecosystem.



### France has entered the global top 10, with Paris continuing to be the highest ranked city in the EU.



France has joined the global top 10 in the 9th position after advancing 3 spots. This part of the Index is characterized by tight competition, as the score gaps are small between the countries ranked 9th (France), 10th (China), 11th (The Netherlands) and 12th (Switzerland). Among EU countries, France is now third.

Paris, which remains the top ranked EU startup ecosystem, also joined the global top 10 after advancing 1 spot, benefiting from Moscow's steep decline. This year, the

best performing industry in Paris is Ecommerce & Retail, where it ranks 8th in the world.

Toulouse remains the 2nd highest ranked ecosystem in France, but the city decreased 23 spots globally to 155th. This is one of the biggest gaps between the 2 top national ecosystems among highly ranked European countries, showcasing the degree of centralization in France.

ı	National Rank and Change	City	Global Rank and Change	Total Score	Overperforming Industry
	1 -	Paris	10 +1	52.877	Ecommerce & Retail
	2 -	Toulouse	155 <sup>-23</sup>	4.974	Transportation <b>*</b>
	<b>3</b> <sup>+1</sup>	Lyon	156 <sup>+8</sup>	4.947	
	<b>4</b> <sup>-1</sup>	Marseille	161 <sup>+2</sup>	4.828	Energy &
	<b>5</b> <sup>+1</sup>	Nantes	211 <sup>+21</sup>	3.857	Transportation 🏚
	<b>6</b> <sup>+1</sup>	Lille	217 <sup>+16</sup>	3.709	
	<b>7</b> <sup>-2</sup>	Bordeaux	219 <sup>-4</sup>	3.691	
	<b>8</b> <sup>+2</sup>	Grenoble	252 <sup>-5</sup>	2.922	Hardware & IoT



France's story is about "Paris and the rest," a very different story compared to Germany and the UK, where several cities are ranked in the global top 100.

Good momentum can be seen for Lyon, which increased by one spot nationally to rank 3rd, and rising 8 spots globally. The startup ecosystems in Marseille, Nantes, Lille, and Montpellier also had a great year with Nantes and Lille increasing by double digits in the global Index.

There are now 12 French cities in the top 500 as opposed to 13 cities in 2021. There are also 9 new cities in the top 1000, with the front runners being Cannes, Caen, and La Rochelle. This brings the total number of ranked ecosystems in France in the top 1000 to 30, increasing from only 24 last year. Overall, France performs best in Foodtech, but also makes a showing in Transportation (in Toulouse and Nantes) and Energy & Environment (in Marseille).

To keep and improve its position in this highly volatile part of the Index, France could benefit from developing its 2nd tier startup ecosystems and pushing them into the global top 100.

### **Startup Ecosystem Overview**

France's public sector is highly active on all fronts in developing local startup ecosystems. It is quite unique for a country to have its president involved directly in the promotion and development efforts of the startup scene, as is the case with President Macron. As France is poised to take over the Presidency of the Council of the European Union in the first half of 2022, the startup policies of the country are

gaining even more attention. The goal of creating a "startup nation" opened the door for a variety of strong international organizations. The most notable are La French Tech, a platform that brings together the networks of startup ecosystem stakeholders, and the newly launched French Tech Visa, an initiative for attracting investors, startup founders, and foreign talent. France is also home to Station-F, the biggest startup campus in the world.

French government initiatives aimed at boosting investments in new high-risk projects and SME modernization seem to be helpful, such as tax breaks to business angels who reinvest capital gains in innovative firms and the streamlining of business creation procedures. However, the direct investment in startups made by the public sector seems to be relatively high compared to other ecosystems, an example being the State bank of Bpifrance, one of the major players in startup funding nationally. It should be noted that relatively strict labor laws and a low level of English proficiency are still limiting the potential of the French ecosystem to grow startups at full speed. The difficulties in reforming the economy affect the ability of the local startup ecosystem to grow faster and achieve its potential. This is a good lesson: regardless of the strategic vision of any country in developing its startup ecosystem, you can't separate it from the regulations and policies on the ground.

It's inspiring to see that some French startups are already leaving their mark globally (Blablacar and Ledger are two of our favorites), and there is much potential for even further future growth.



The number of French unicorns is truly a success for the country, and the long lasting impact of these achievements should translate into a higher number of foreign investments. Al is one industry that seems to be in focus over recent years in France, supported by direct government investment. Time will tell if France can become a global leader in this field.

# Early stage Median round: \$1.75M Medium and late stage Median round: \$11.85M 7% 93%

## Notable Startups and Ecosystem Champions

→ Deezer Unicorn

Paris, France

Deezer is a digital music streaming service.

⇒ BlaBlaCar Unicorn

Paris, France

BlaBlaCar is the world's leading long distance carpooling service, connecting drivers with empty seats to people traveling the same way.

⇒ Veepee Unicorn 

€

Saint-Denis, France

Veepee is an international e-commerce company.

### **Pantheons**

### Schneider Electric

### Paris, France

Schneider Electric is an electric company that creates and develops products that help people conserve energy.

### Airbus

### Toulouse, France

Airbus is an international pioneer in the aerospace industry.

### Orange

### Paris, France

Orange is a digital operator that offers mobile and internet services in Europe and Africa, and corporate telecommunication services.



### China remains in the top 10 after a substantial loss in momentum.



This year, China experienced the most substantial loss in momentum among the top 10 countries, dropping from 7th to 10th. Furthermore, the gap in score between China and its two main contenders, The Netherlands (11th) and Switzerland (12th), is minimal, putting both these countries in a good position to overtake China next year. This is a complete reversal in momentum after years of positive growth. The country has also lost its position as a leader in the Asia Pacific region where it now ranks 3rd, overtaken by both Singapore (7th globally) and Australia (8th).

Beijing and Shanghai are still global top 10 cities. However, Beijing decreased by 3 spots to 6th while Shanghai maintained its position at 7th. In spite of not losing rank, Shanghai clearly has negative momentum.

National Rank and Change	City	Global Rank and Change	Total Score	Overperforming Industry
1 -	Beijing	6 -3	102.695	Edtech 🙎
2 -	Shanghai	7 -	70.617	Transportation 🙎
<b>3</b> <sup>-</sup>	Shenzhen	18 <sup>+3</sup>	35.101	Hardware & IoT
<b>4</b> <sup>+1</sup>	Hangzhou	30 <sup>+3</sup>	24.846	Transportation 💃
<b>5</b> <sup>-1</sup>	Hong Kong	36 <sup>-4</sup>	22.091	Fintech
6 -	Guangzhou	51 <sup>+14</sup>	13.486	Transportation 💃
7 -	Chengdu	78 <sup>+8</sup>	8.460	Transportation <b>**</b>
<b>8</b> <sup>+1</sup>	Wuhan	114 <sup>+60</sup>	6.342	Ecommerce & Retail
<b>9</b> +2	Changsha	127 <sup>+89</sup>	5.581	
10	Nanjing	157 <sup>+48</sup>	4.938	



This is evident from the growing gap between Shanghai and higher ranked cities, as well as the shrinking gap with lower ranked cities

Beijing and Shanghai still maintain dominance in the Asia Pacific region where they are ranked 1st and 2nd.

Beijing has a strong position and a close total score to Boston and Los Angeles, but the Indian ecosystem of Bangalore is closing the gap with Shanghai.

The best news for China comes from its 2nd and 3rd tier ecosystems. Shenzhen increased by 3 places and ranks 18th in the world, while Hangzhou has risen to 30th. As such, China now has 4 cities in the competitive top 30 as opposed to only 3 cities in 2021. This achievement is only matched by the United States.

Hong Kong has had a negative momentum both nationally and globally. The ecosystem decreased one spot nationally and was displaced by Hangzhou, while globally it lost 4 spots to rank 36th. This continues a negative trend for Hong Kong, a city that in 2019 was ranked 2nd nationally and 28th globally.

Good momentum can be seen in Guangzhou (ranked 51st) and Chengdu (ranked 78th), which maintain their national ranks. Wuhan (ranked 114th) increased by a staggering 60 places globally and 1 place nationally. Entering the global top 200 are Changsha (ranked 127th) and Nanjing (ranked 157th) after jumping 89 and 48 spots respectively. China now boasts 12 cities in the top 200 as opposed to only 9 last year.

Some cities with a negative momentum this year include Xiamen (at 188th), TianJin (at 259th), and Zhengzhou (at 470th).

Debuting in the top 1000 rankings this year are Yangzhou (at 285th), Xi'An (at 391st), Zhenjiang (at 566), Hainan (at 675th), and Guiyang (at 716th). This brings the total number of Chinese cities in the top 1000 to 44.

China's ecosystems excel in a diverse number of industries. Edtech is ranked 2nd in Beijing and Transportation is 2nd in Shanghai, while Shenzhen is ranked 3rd in Hardware & IoT.

### **Startup Ecosystem Overview**

The transition China has made from a low-tech developing country to a cutting-edge technological power is inspiring. The Chinese government prioritizes technology development as a strategic goal, as the nation channels massive investments and efforts into becoming a world leader with state of the art tech hubs.

However, China has made a clear decision not to open its ecosystems globally. The majority of China's startups are focused only on China's economy, and have a limited regional or global footprint. Chinese tech users are also relatively isolated from the global Internet by the great firewall which regulates online traffic in China. Given the sheer size of the country's economy, Chinese ecosystems were able to achieve impressive growth and create an extraordinary number of startups and unicorns. While we once believed that China had the potential to lead the global startup ecosystem in the medium/long term if its approach was open and global, this may no longer be in the cards.



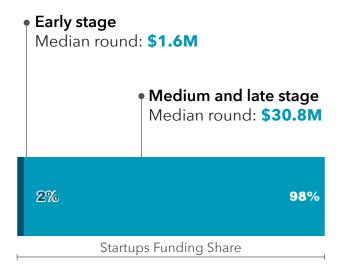
Much of the growth potential of Chinese ecosystems has already been realized, and the current inward trend limits the ability of China to pursue other tech markets.

Another critical challenge for China is managing friction between its successful founders and the state. Unlike in the West, where tech leaders have a free hand in achieving celebrity status and working on projects like sending spaceships to other planets, becoming a Chinese entrepreneur can come with restrictions. The usual failure rate of startups may be the same as in the West, while the ability to "celebrate" your success, if achieved, is limited. Not only that, but success might even put you on a direct collision course with the law, as the recent ANT Group IPO saga have shown. China's ban on cryptocurrencies could turn out to be another example of a missed opportunity in a sector with the potential to become increasingly important globally, and where China has excelled in the past.

A few years ago, Chinese corporations became increasingly active as successful players in the global consumer market, with Alibaba, Xiaomi, Huawei, and Tencent leading the way. TikTok, a popular B2C application, has also taken the world by storm. Restrictions imposed on some of these tech giants by Western economies have put pressure on those global companies and limited their growth. Chinese tech stocks valuations have taken a battering from both external and internal pressures.

Lately, the Chinese government is sending positive signals of lessening restrictions on its startups and successful founders, which has the potential to mitigate some of this damage. China's focus on self-reliance for strategic sectors, like the semiconductor industry, is also likely to result in the creation of massive, successful companies and a surge in funding. China's most prominent unicorns are focused on automation & AI, along with a strong Hardware & IoT presence in the impressive Shenzhen startup ecosystem.

It's understandable why Chinese entrepreneurs choose to focus locally, considering the outstanding size of the national market. However, in the long run, China is the only country other than the US that can directly contend for global entrepreneurial leadership. To do that, China should aim internationally, and that can only be done by connecting to the global Internet and allowing Chinese entrepreneurs to flourish.





# Notable Startups and Ecosystem Champions

⇒ Hozon Auto Unicorn

### Shanghai, China

Hozon Auto focuses on the research, development and manufacturing of new energy vehicles (NEV).

⇒ Chipone Unicorn (\*)

### Beijing, China

Chipone is a total display control solution provider. Its products cover diversified fields in mobile display, panel display, LED panel display, and LED lighting.

### Hangzhou, China

Kujiale is a SaaS-enabled home decoration and design platform.

### **Pantheons**

### Huawei

### Shenzhen, China

Huawei is a multinational technology company that provides telecommunications equipment and consumer electronics.

### Xiaomi

### Beijing, China

Xiaomi is an electronics and software company that focuses on mobile devices and technology.

### Shein

### Shenzhen, China

Shein is an online marketplace that offers apparel, cosmetics, accessories, and home goods.

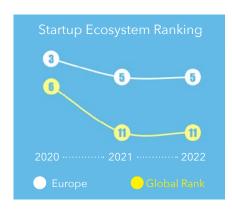
### **Our Report Partners**





# 11 | The Netherlands

### The Netherlands had a stable year, maintaining its 11th position.



While the Netherlands couldn't make up for last year's loss in momentum, the country remains stable in the 11th position. This is a highly competitive area in the Index, as the countries ranked 9th (France), 10th (China), 11th (The Netherlands) and 12th (Switzerland) all have very similar scores, making this tier of the Index very volatile and susceptible to change next year. In the EU, the Netherlands is ranked 4th, after Sweden, Germany, and France, decreasing one spot since 2021.

Within the country, the ecosystems have a mixed story of both positive and negative momentum.

Amsterdam increased 2 places globally to 27th and excels in Hardware & IoT, an industry where it ranks 13th. However, among the country's top 5 ecosystems, only Amsterdam saw improvement. The gap in total score between Amsterdam and the 2nd ranked national ecosystem, The Hague, has quintupled, indicating a deeply centralized startup scene.

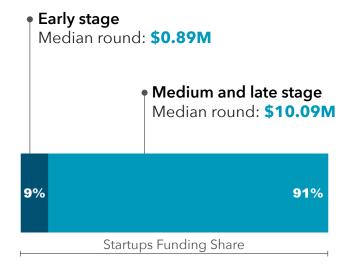
National Rank and Change	City	Global Rank and Change	Total Score	Overperforming Industry	
1 -	Amsterdam	27 +2	26.807	Hardware & IoT 🏚	
2 -	The Hague	154 <sup>-31</sup>	5.026	Energy & <b>p</b> Environment	
<b>3</b> <sup>+1</sup>	Eindhoven	176 <sup>-19</sup>	4.609	Energy & grant Environment	
<b>4</b> <sup>-1</sup>	Utrecht	179 <sup>-48</sup>	4.559		
5 -	Rotterdam	185 <sup>-13</sup>	4.468		
6 -	Maastricht	221 <sup>+129</sup>	3.682	Hardware & IoT	
<b>7</b> +2	Nijmegen	271 <sup>+162</sup>	2.538		
 8 -	Enschede	345 <sup>+59</sup>	1.559		



All 2nd tier Dutch startup ecosystems (those ranked 100-200) decreased significantly: The Hague (ranked 154th) went down 31 places and Eindhoven (ranked 176th) went down 19 places, although increasing in national rank (now 3rd). Energy & Environment are strong industries in The Hague and in Eindhoven, where they rank 57th and 52nd respectively. On the other hand, Utrecht lost one spot nationally and 48 spots globally, now ranking 179th. Also decreasing, Rotterdam is now ranked 185th.

Some 3rd tier ecosystems had a good year. Most notably, Maastricht increased 129 spots and Nijmegen 162 spots, each entering the global 300 at rank 221st and rank 271st respectively. Good momentum can also be seen for Enschede (ranked 345th) and for 's-Hertogenbosch (ranked 551st).

Overall, the Netherlands boasts 23 cities, a small increase versus 22 last year.



### **Startup Ecosystem Overview**

The Netherlands is home to numerous influential startups that have developed into global players, including Booking. com and Adyen.

The country offers an outstanding level of urban innovation and quality of life to both local entrepreneurs and immigrating talent. The Netherlands even offers a Startup visa for non-EU citizens, and has set up an ambitious Entrepreneurship Action Plan consisting of different measures to fund and support entrepreneurs.

In addition, the Netherlands has registered record numbers of VC investments in the past few years. Considering the amount of funding and support from agencies such as <a href="Techleap.nl">Techleap.nl</a>, it is not surprising that the country has the ambitious goal of becoming a 'unicorn nation'.

On the other hand, this level of progress comes with some drawbacks for startup founders who might get discouraged by the high cost of living and by the rigorous labor laws protecting employees.

The Netherlands is already primed for global scaling, especially considering the high level of English spoken in the country and the tax structure which encourages the immigration of foreign workers. The country is also culturally impacting the global startup ecosystem with strong tech media and events such as <a href="mailto:TheNextWeb">TheNextWeb</a>, and bootstrapping thought leaders like Pieter Levels, founder of <a href="Momad List">Nomad List</a>.



### **Notable Startups and Ecosystem Champions**

### → Mambu Unicorn (\*)



### Amsterdam, The Netherlands

Mambu is a software-as-a-service banking engine provider that powers lending and deposit services.

### → MessageBird Unicorn (\*)



### Amsterdam, The Netherlands

MessageBird is a cloud communications platform that connects enterprises to their global customers.

### → Friss Unicorn (\*)



### Utrecht, The Netherlands

Friss is a fraud detection and risk management company.

### **Pantheons**

### Booking.com

### Amsterdam, The Netherlands

Booking.com is a travel fare aggregator website and travel metasearch engine for lodging reservations.

### Philips

### Amsterdam, The Netherlands

Philips is one of the largest electronics companies in the world, currently focused on the area of healthcare and lighting.

### The Next Web

### Amsterdam, The Netherlands

TNW is a global digital brand that informs, inspires, and connects people who love tech through media, events, and services.

### **Our Ecosystem Partner**



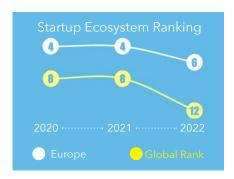
### **Our Report Partners**





# 12 | Switzerland

### Switzerland loses momentum for the first time in 4 years.



Switzerland, which ranked 8th globally for 4 years in a row, has now dropped entirely from the global top 10. The country's startup scene is now ranked 12th in the world. While its total score indicates that the Swiss loss in momentum is not significant, a highly competitive ranking environment allowed other countries to surpass Switzerland this year. In Europe, Switzerland is ranked 6th, boasting a considerably higher Quantity score than all its contenders, with the exception of the UK.

Switzerland's top 3 startup ecosystems have all decreased in ranking. Zurich lost 11 places, landing at 68th with its strongest industry now Energy & Environment where it ranks 42nd. With Basel and Lausanne decreasing by 14 spots and 13 spots respectively, Switzerland has lost 2 of its 3 entries in the global top 100 list. However, Basel (ranked 2nd nationally) is the only city in Switzerland to be ranked in the top 30 for industries. The Basel startup ecosystem excels in Healthtech, where it ranks 29th.

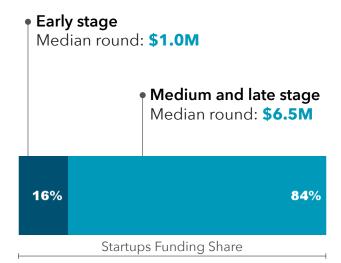
ı	National Rank and Change	City	Global Rank and Change	Total Score	Overperforming Industry
	1 -	Zurich	68 <sup>-11</sup>	9.625	Energy & Environment
	2 -	Basel	107 <sup>-14</sup>	6.775	Healthtech
	3 -	Lausanne	109 <sup>-13</sup>	6.703	Energy & <b>**</b> Environment <b>**</b>
	<b>4</b> <sup>+1</sup>	Zug	121 <sup>+45</sup>	5.790	Hardware & IoT
	<b>5</b> <sup>-1</sup>	Geneva	138 <sup>-20</sup>	5.329	Ecommerce & Retail
	6 -	Sankt Gallen	193 <sup>+11</sup>	4.332	Software & Data 雄
	7 -	Bern	304 <sup>-80</sup>	2.017	
	<b>8</b> <sup>+1</sup>	Lugano	358 <sup>+67</sup>	1.472	



Good news from Zug, a city that saw a jump both nationally and globally. Zug advanced one spot and displaced Geneva at 4th nationally. Globally, the city made a massive leap of 45 spots to rank 121st in the world. Geneva, on the other hand, decreased 20 spots to 138th while remaining close to Zug in total score.

In the national top 10, some younger startup ecosystems experiencing good global momentum this year include Sankt Gallen (at 193rd), Lugano (at 358th), and Neuchatel (at 481st).

Overall, Switzerland has added 3 new cities to the rankings this year, boasting 17 cities in the top 1000 as opposed to 14 in 2021.



### **Startup Ecosystem Overview**

Switzerland projects the image of a strong and well organized country. Its banking policies and financial stability make it a reliable place for investment. One of its key advantages is the relative openness of its regulators toward change and disruption. This was clearly evident when the nation became one of the world's strongest Blockchain ecosystems, and is especially evident in Zug, where Ethereum is headquartered. In addition to fintech, Switzerland enjoys a strong performance in the industry of life science, which is not surprising considering it is home to several global pharmaceutical companies, including Novartis. Zurich has also established itself as a hub for innovation, offering the perfect climate for startups to become unicorns.

The highly skilled labor force is a valuable asset for Switzerland, despite this also translating into a high employment cost for startups. Fortunately, the country makes it easy for regional citizens to enter and work in Switzerland due to the agreements it has established with the European Union. Switzerland also has a great track record in attracting foreign investment, and even offers a Golden Investor Visa. In 2021, the country saw a 44% increase in investment, with the ICT/ fintech and biotech sectors as top choices for funding.

Switzerland's public sector is focused on promoting entrepreneurial awareness and positive attitudes towards startups. Additionally, the country has strong physical, commercial, and professional infrastructures for supporting entrepreneurship.



# Notable Startups and Ecosystem Champions

**⊃ Nexthink** Unicorn **(\*** 

Prilly, Switzerland

Nexthink is a digital employee experience management software.

→ Acronis Unicorn

Schaffhausen, Switzerland

Acronis is a cybersecurity company that solves safety, accessibility, privacy, authenticity, and security challenges.

Zurich, Switzerland

Scandit is a technology platform that offers smart data capture and barcode scanning software solutions for its users.

### **Pantheons**

Nestle

Vevey, Switzerland

Nestle is a multinational food and drink processing conglomerate.

Novartis

Basel, Switzerland

Novartis is one of the largest pharmaceutical companies by both market capitalization and sales.

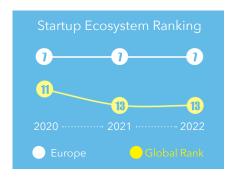
### **Our Ecosystem Partners**





# 13 | Estonia

## Estonia had a stable year, with Tallin advancing in the global startup scene.



After last year's decline, Estonia remains stable at 13th globally, 7th in Europe and 5th in the EU. Even with its small population, Estonia's impressive ecosystem outranks most of its Nordic neighbors (Finland, Denmark, Norway, and Iceland).

Tallinn, the country's leading ecosystem, advanced 4 spots to 62nd globally and retained its position as the highest ranked ecosystem among the Baltic states. The ecosystem continues to be strong in Marketing & Sales where it ranks

19th in the world, a mild decrease from last year. While maintaining its national rank of 336th, Tartu fell even further away from Tallinn after a drop of 91 spots.

Although the number of ranked cities in Estonia remained unchanged, we have detected seed activity in other cities. If these cities show stronger results, they may join the Index next year, which will further strengthen the Estonian ecosystem. Generally, Estonia's focus should be on improving the position of Tallinn, as it is in a highly competitive environment.

In response to the results of the Index, the Deputy Mayor of Tallinn, who is responsible for innovation and Enterprise Services, Joosep Vimm, said:

"Obtaining a yearly increase in StartupBlink's rankings could be the minimum that the city targets in cooperation with the sector. One of our strengths in recent years, as highlighted in the report, has been the diversification of Tallinn's startup ecosystem and positive development regarding business ideas, investments and the working environment."

ľ	National Rank and Change	City	Global Rank and Change	Total Score	Overperforming Industry	
	1 -	Tallinn	62 +4	10.301	Marketing & Sales	
	2 -	Tartu	366 <sup>-91</sup>	1.416		



### **Startup Ecosystem Overview**

One of the most important milestones in the history of the Estonian ecosystem was the success of Skype, an app largely developed in Estonia. Skype's founders used this exit windfall to support new successful local startups. The Skype Mafia,' as they are called, show how big an impact one exit can have on the culture of an entire startup ecosystem.

There have also been effective and aggressive marketing efforts performed by the Estonian public sector, the likes of which we have not seen anywhere else in the world. Examples of this include several innovative projects that started in Estonia and are now being copied by dozens of governments around the world: Estonian E-residency, startup and **nomad visas**, and the branding of companies as completely digitized. These efforts result in the word Estonia now being whispered by digital nomads and small business owners in many developing countries, an impressive accomplishment for a country of less than 2 million inhabitants. The small population also means that startups in Estonia are in strong competition for talent, and the public sector has the difficult task of providing the booming startup scene with a steady influx of foreign talent. The Work in Estonia Program, launched by Estonia's Government, aims to attract new IT specialists as well as talent in natural and exact sciences. So far the country seems to be attractive to foreigners, with Startup Estonia reporting in 2021 that over 27% of startup employees were from other countries.

However, Estonia's challenges remain unchanged as it aspires to grow. First, Estonia must continue to make sure actual results on the ground match the expectations created by its effective marketing efforts. Second, Estonia should be forewarned that initiatives like e-residency and the nomad visa can attract lifestyle businesses to Estonia instead of making it a serious hub for scale startups that could expand globally or seek access to capital and potential clients.

Estonia should also carefully transition from a development center, where companies from wealthier countries might come to develop startups (e.g. Skype, Playtech), and instead focus on building its own locally sourced startups, especially considering that the cost of living in Estonia is growing to match the country's economic success. Estonia has proved it can produce successful startups like Wise, Bolt, and Pipedrive. As the Wise transition to London has shown, one key challenge the country faces will be making sure its unicorns stay in the ecosystem instead of leaving for bigger startup hubs.

According to the Startup Estonia White Paper 2021-2027, the nation continues to support its growing startup ecosystem, has set a number of goals focused on growing the Estonian startup and technology sector to 15% of the nation's GDP by 2025, and actively promotes an all-inclusive startup mindset.



### **Notable Startups and Ecosystem Champions**





### Tallinn, Estonia

Veriff is an online identity verification company that protects businesses and their customers from online identity fraud.



### Tallinn, Estonia

Bolt is a transportation platform providing ridehailing, micro-mobility, and food and grocery delivery services

### Montonio

### Tallinn, Estonia

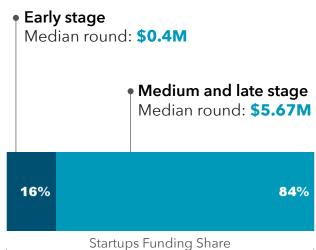
Montonio connects payment orchestration and payment initiation into a full-checkout solution for European e-commerce stores.

### **Pantheons**

### E-Residency

### Tallinn, Estonia

E-Residency enables digital entrepreneurs to start and manage an EU-based company online.



### **Our Ecosystem Partner**



# 14 Finland

## Finland maintains its 14th rank while moving to close gaps with Estonia.



Finland maintained its position from last year at 14th globally. Among the Nordic countries, Finland is 2nd only to Sweden, and in the EU the country ranks 6th.

Looking at its total score, Finland seems to be slowly closing gaps with Estonia (ranked 13th in the world). In addition, Finland greatly improved its Business score, which is now 4th in the world, a 3 place jump from last year, demonstrating an entrepreneur-friendly business environment. There are two industries where Finald seems

to particularly excel: Foodtech, where Helsinki is ranked 18th in the world, and Healthtech, where Oulu ranks 30th in the world.

With a 4 point decrease, Helsinki remains in the global top 50 at 48th. In the EU, however, the city is in the top 10 at 8th.

National Rank and Change	City	Global Rank and Change	Total Score	Overperforming Industry	1
1 -	Helsinki	48 -4	14.795	Foodtech	
<b>2</b> <sup>+1</sup>	Oulu	195 <sup>+137</sup>	4.312	Healthtech	
<b>3</b> <sup>+1</sup>	Turku	300 <sup>+80</sup>	2.041		
<b>4</b> <sup>-2</sup>	Tampere	328 <sup>-2</sup>	1.674		
5 -	Jyvaskyla	743 <sup>-71</sup>	0.325		
6 -	Joensuu	768 <sup>-52</sup>	0.300		
<b>7</b> new	Lappeenranta	896 <sup>new</sup>	0.201		
<b>8</b> new	Kuopio	925 <sup>new</sup>	0.191		
<b>9</b> new	Salo	927 <sup>new</sup>	0.190		



Helsinki maintains its dominance nationally with a total score considerably higher than any other Finnish startup ecosystems. However, it's good to see 2nd tier ecosystems have moved this year, closing the gap with the national leader.

Oulu, now Finland's 2nd ranked startup ecosystem, advanced 137 spots globally to 195th. If sustained, this advancement may signal Finland's startup ecosystem to reach a new level of maturity.

So far, Finland's startup scene has been characterized by concentrated entrepreneurial innovation in one city, Helsinki, with no other city reaching the global top 200. This year, for the first time, we see signs of a second Finnish city rising, and we hope Oulu continues this upward trend, giving Finland a second stable, strong ecosystem.

Turku also continued to show positive momentum, climbing the national ranks and positioning itself as Finland's third startup ecosystem, as well as advancing into the global top 300. Due to the stellar momentum of these two cities, Tampere decreased in the Index to 4th nationally and 328th in the world.

We would like to congratulate the three Finnish cities that have entered the Index this year: Lappeenranta (at 896th), Kuopio (at 925th), and Salo (at 927th). In the top 1000, Finland now has 9 cities as opposed to 6 last year, signaling both that entrepreneurial activity is accelerating in the country and that the startup scene is becoming less concentrated. Going forward, Finland should make sure that Helsinki, its top startup ecosystem, retains its positive momentum.

### **Startup Ecosystem Overview**

Finland has a thriving startup ecosystem supported by key factors like the country's location, access to sea routes with modernized ports, world-class technology, a talented workforce, and excellent R&D opportunities.

The public sector in Finland offers many incentives and is generally supportive of startups. The government offers funding and services for innovative early-stage companies and supports universities in commercializing their ideas. For instance, the Finnish Startup Permit makes it possible for international growth entrepreneurs to build a startup company in Finland. The permit is meant for innovative startup founders coming from countries outside the European Union.

In addition, the Finnish business environment is attractive to foreign investment. Finland has a vibrant ecosystem of accelerators, angel investors, and VCs backed by strong government support.

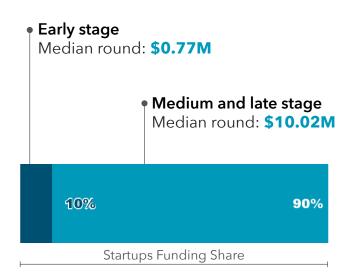
In 2022, Finland was named the happiest country in the world for the 5th year in a row by the United Nations World Happiness Report. The Finnish society is generally stable and transparent, with a low level of bureaucracy.

It should also be noted that one of the world's biggest global startup events that involves tens of thousands of participants, Slush, is hosted in Finland, giving the nation's rankings a boost. The country has consolidated its stake in gaming and has an increasing number of tech innovations aimed at developing this sector. In addition to a developed gaming industry (any Angry birds players here?



It's Finnish as well), Finland offers growth opportunities for companies, especially in the fields of bioeconomy, clean and smart technologies, health and wellbeing, ICT and digitalization, and travel and tourism.

Finland's main challenges remain twofold: a small local market, and the difficulty of building its startup ecosystems into global hubs. As the majority of Finland startups are located in Helsinki, the city is becoming a major startup center in Northern Europe.



### **Our Report Partner**



### Notable Startups and **Ecosystem Champions**

RELEX Solutions Unicorn (6)



Helsinki, Finland

RELEX Solutions provides an integrated retail and supply chain planning system.

Oulu, Finland

ŌURA is a wellness app used for sleep improvement.

Helsinki, Finland

Aiven is an information technology company that manages open-source data infrastructure in the cloud.

### **Pantheons**

### Slush

Helsinki, Finland

Slush is a leading startup event, connecting founders with resources while building a culture of entrepreneurship.

Nokia

Helsinki, Finland

Nokia is a multinational communications corporation engaged in the manufacturing of mobile devices and network infrastructure.

⇒ Wolt

Helsinki, Finland

Wolt is a food delivery company specializing in real-time logistics optimization.

# 15 | Ireland

### Ireland has jumped 3 spots, advancing Dublin in the top 50.



Ireland has had great results this year, jumping 3 spots to rank 15th in the world, bypassing Spain and Lithuania. Ranked 9th in Europe and 7th in the EU, the country has strengthened its position among the top 10. All of Ireland's top startup ecosystems had positive momentum. Most notably, Dublin (ranked 46th) has entered the global top 50 after increasing 5 spots, overtaking Taipei, Helsinki, Madrid, and Phoenix. The ecosystem's main strength is in the Energy & Environment industry, where it ranks 11th globally.

There are substantial gaps in total score between Dublin and 2nd tier cities (Cork, Galway, and Limerick). However, these ecosystems are advancing in the global startup scene. Cork (ranked 297th) and Galway (ranked 298th) have entered the top 300. The highest momentum among ranked Irish cities is in Limerick, now ranked 399th after jumping 132 spots. Only one Irish city decreased this year: Waterford dropped 151 spots to 996th, remaining in the top 1000. There are two cities making a debut in the Index for Ireland: Tralee (at 6th nationally) and Donegal (at 7th nationally).

National Rank and Change	City	Global Rank and Change	Total Score	Overperforming Industry
1 -	Dublin	46 +5	15.049	Energy &
2 -	Cork	297 <sup>+17</sup>	2.154	
3 -	Galway	298 <sup>+21</sup>	2.067	
4 -	Limerick	399 <sup>+132</sup>	1.205	
<b>5</b> <sup>+1</sup>	Dundalk	866 <sup>+49</sup>	0.222	
6 new	Tralee	931 <sup>new</sup>	0.287	
<b>7</b> new	Donegal	957 <sup>new</sup>	0.276	
 <b>8</b> <sup>-3</sup>	Waterford	996 <sup>–151</sup>	0.158	



While these new additions improve the country's Quantity score, Ireland will need to bring more of its cities closer to the top to match the Quality scores of its contenders.

### Startup Ecosystem Overview

Ireland's ecosystems enjoy a few substantial advantages. The country is perfectly located between North America and Europe, and has a highly skilled, native English speaking population. All this, combined with a generous tax policy which encourages giants like Google and Facebook to place their international headquarters in the country, lays the foundation for a global hub. However, the presence of high profile American corporations, while great for the economy, also creates a challenge for the startup scene, as many potential entrepreneurs have the option of taking high paying jobs for established companies instead of following the uncertain path of entrepreneurship.

Brexit has made Ireland a good substitute for EU tech talent wishing to relocate to an English speaking country with an abundance of tech jobs, especially now that the UK is no longer an easy option for immigration. While Brexit relocations are

Early stage Median round: \$0.8M Medium and late stage Median round: \$7.2M 13% 87% Startups Funding Share

currently on the decline, Dublin remains the most popular EU city to relocate to for United Kingdom financial service firms. However, Ireland's potential has yet to be fully realized, and many talented Irish founders still choose to relocate or establish their startups in more prominent ecosystems (e.g. Stripe, which was founded by the Collision brothers). The public sector is trying to reverse this with measures aimed at attracting investment. For example, the **Employment Incentive** and Investment Scheme (EIIS) offers tax relief to investors, while IDA Ireland is facilitating multinational integration and general economic improvement. In addition, the public agency **Enterprise** <u>Ireland</u> is providing generous support for startups by implementing a number of useful initiatives, such as Start In Ireland (a one-stop-shop with information relating to the Irish startup landscape). As more regional startups gain unicorn status (Wayflyer, Flipdish) we hope to see even more global attention paid to this vibrant startup scene.

### **Notable Startups and Ecosystem Champions**

**⇒** AQMetrics Unicorn (\*)



Kildare, Ireland

AQMetrics offers Legal Governance and Risk & Compliance (GRC) software for financial service firms trading on global financial markets.

### Wayflyer

Dublin, Ireland

Wayflyer is a revenue-based financing platform for e-commerce brands.

### Flipdish Unicorn 🏀

Dublin, Ireland

Flipdish helps on-demand food businesses create branded food ordering systems, websites, and apps.



### Spain's negative momentum didn't affect Barcelona.



Spain continues its negative momentum from last year, decreasing one spot to 16th in the world and 10th in Europe. Among the EU countries Spain is 8th, and the country's best ecosystems, Barcelona and Madrid, are 5th and 9th in the EU.

Seven of Spain's eight top startup ecosystems (Barcelona being the exception) had negative momentum this year, which is unfortunate for Spain's startup scene. In 2021, Spain had 8 cities in the top 300, a strong contrast to only

4 cities this year. While Barcelona remains stable at 37th as the top Spanish startup city, we have seen a mild negative momentum in Madrid, which managed to remain in the top 50, despite a 5 spot decrease. In addition, the city remains in the top 30 for Software & Data. It should be noted that Spain is the only European country other than Germany that boasts two cities in the ranking, an achievement that even the UK didn't accomplish.

The other two cities in the top 300 are Valencia (at 159th) and Bilbao (at 270th). Seville increased in the national rankings by 3 spots to 5th in Spain, despite going down 25 spots in the global Index where it ranks 324th.

ı	National Rank and Change	City	Global Rank and Change	Total Score	Overperforming Industry	
	1 -	Barcelona	37 -	20.669	Foodtech	
	2 -	Madrid	50 <sup>-5</sup>	14.378	Software & Data	
	3 -	Valencia	159 <sup>-13</sup>	4.911	Hardware & IoT	
	4 -	Bilbao	270 <sup>-53</sup>	2.558		
	<b>5</b> +3	Seville	324 <sup>-25</sup>	1.724		
	<b>6</b> <sup>+1</sup>	Malaga	351 <sup>-58</sup>	1.519		
	<b>7</b> <sup>-2</sup>	Las Palmas de Gran Canaria	360 <sup>-135</sup>	1.462		
	<b>8</b> <sup>-2</sup>	Santa Cruz de Tenerife	372 <sup>-127</sup>	1.383		



Positive momentum in their national rankings can be seen for Malaga as well, ranked 6th in Spain and 351st in the world, yet Malaga dropped 58 spots globally. This positive national momentum for Seville and Malaga can be explained by the decrease of other ecosystems, including Las Palmas de Gran Canaria (ranked 360th) and Santa Cruz de Tenerife (ranked 372nd).

Improvements in Spain's startup scene can be seen at the level of its lowest tier: Donostia-San Sebastian jumped 193 spots to 414th and Pamplona made a meteoric jump of 378 places to 430th. Significant momentum was registered also in Oviedo, A Coruna, Alicante, and Castellon de la Plana.

Spain excels in the Quantity score where it ranks 7th in the world, boasting a multitude of ecosystems. Some of the new ecosystems that have entered the top 1000 this year are Córdoba, Valladolid, Lleida, Reus, Elche, Vigo, Manresa, Granollers, Cadiz, Salamanca, Sant Just Desvern, and Almería. This brings the total number of Spanish ecosystems in the top 1000 to 39, a substantial increase from last year's 28 cities. Such an increase in the number of ranked cities is a very positive sign of a maturing ecosystem; it somewhat compensated for the negative momentum of Spain's top 8 ecosystems. In order to reverse its decline in the Index, Spain should further invest in growing these smaller ecosystems while helping larger ecosystems regain their competitiveness in the global arena.

### **Startup Ecosystem Overview**

The Spanish startup ecosystem is younger than other European countries and offers entrepreneurs a more affordable cost of living, in addition to an abundance of sunny weather. Unlike most centric European countries, Spain is blessed with two strong ecosystems, Barcelona and Madrid. While these two cities are the backbone of the Spanish startup scene, a lot of innovation and talent has come out of Valencia and other younger startup ecosystems in Spain. However, Spain needs to create more global startups to help lead its ecosystems, and prevent brain drain by providing opportunities to its most ambitious talent.

Ironically, long-term high unemployment rates in Spain have had positive effects on the Spanish startup ecosystem, as the difficulty in finding high quality jobs pushes more people toward entrepreneurship. This phenomenon is especially relevant in times of crisis when the social safety net is contracting.

Regulations to help attract talent have already been established, and foreign entrepreneurs can use an entrepreneur visa or <u>Start Up visa</u> to establish a company in Spain.

Spain's economy is known for its red tape and bureaucracy, which needs to be confronted in order to allow startups to truly advance. Addressing the challenge of regulation reform, the Spanish government has launched the Spain Entrepreneurial Nation, a tenyear plan to position Spain's brand as a country focused on innovation and entrepreneurship.



The plan includes a new startup law with the goal of supporting early stage startups with tax incentives and reduced bureaucracy. For example, startups led by women will benefit from regulatory sandboxes. With Glovo and Cabify, Spain proved its capacity to produce national/regional unicorns, and we hope that these success stories will inspire other entrepreneurs and promote foreign investment in the Spanish startup ecosystems.

A core advantage Spain enjoys is a shared language and a deep connection with Latin America. As Latin American startup ecosystems grow, it is natural that they work with Spain as their gateway into Europe and other global markets.

# Early stage Median round: \$0.52M Medium and late stage Median round: \$4.25M 10% Startups Funding Share

# Notable Startups and Ecosystem Champions

Madrid, Spain

Cabify is a marketplace for personal transportation.

**⇒** Jobandtalent Unicorn €

Madrid, Spain

Jobandtalent is an online staffing marketplace for finding and filling gig-type jobs.

→ TravelPerk Unicorn (\*)

Barcelona, Spain

Aiven is an information technology company that TravelPerk is a travel platform that provides travel and expense management services for business travelers.

### **Pantheons**

### Telefonica

Madrid, Spain

Telefónica is one of the largest telephone operators and mobile network providers in the world.

Glovo

Barcelona, Spain

Glovo is a courier service that purchases, picks up, and delivers products ordered through its mobile application.

### Mobile World Capital

Barcelona, Spain

MWC Barcelona is one of the world's most influential events for the connectivity industry.



Please refer to the ecosystem case study section to read a <u>detailed analysis of</u> <u>Barcelona</u>'s and <u>Madrid's startup ecosystem</u>.



### **Our Ecosystem Partners**







### **Our Report Partners**













### Vilnius overtakes Prague and Warsaw and enters the global top 80.



Lithuania did not recover from the slight negative momentum that began in 2021. Still in the top 20, this small and inspiring country ranks quite well considering its relatively small population. In the Baltics, Lithuania is 2nd only to Estonia, which has a considerably better Quality score. In the EU region, Lithuania is ranked 9th. Its highest ranking city, Vilnius, has advanced to the 16th EU position, right after Hamburg.

The startup scene in Vilnius improved this year, despite the country's decrease in rank. There was a surge of 4 points for Vilnius, propelling the city into the top 80. Vilnius also fortified its position within the Eastern European region, where it rose 3 positions to 4th, leaving Prague and Warsaw behind. Excelling in Marketing & Sales, Vilnius is ranked 35th in this industry.

Kaunas, ranked 191st, had a difficult year, losing momentum but managing to remain in the top 200 and keep its position as the 3rd ranked city in the Baltics, preceding Latvia's capital Riga. This is a unique status for Kaunas, as it is the only non-capital city in the Baltics showing in the top 200. Lithuania's 3rd ranked ecosystem is Klaipeda, which decreased massively to 964th after losing 167 spots.

National Rank and Change	City	Global Rank and Change	Total Score	Overperforming Industry	1
1 -	Vilnius	80 +4	8.444	Marketing & sales	,
2 -	Kaunas	191 <sup>-56</sup>	4.343	Marketing & Sales	
3 -	Klaipeda	964 <sup>-167</sup>	0.174		



# **Startup Ecosystem Overview**

The relatively low cost of living in Lithuania and its skilled software developers are a positive boost to the national ecosystem. Fintech is a core industry focus in Lithuania, where constant innovation and the government's easing of regulation, including a blockchain sandbox, is attracting major international players. One example is the UK-based fintech startup Revolut, which launched a licensed bank in Lithuania in 2020.

Lithuania's fintech efforts also seem to be paying off, as a fintech report by our partners at Findexable ranked Lithuania in the 10th spot globally in 2021. But fintech is not the only sector providing good news. One booming sector with an international reach in Lithuania is life sciences – it's the fastest growing in the EU with steady annual growth.

One noticeable recent trend is the significant rise in acquisitions and buyouts of Lithuanian startups.

This is a key indicator that the sector is maturing and that the innovations developed here are meeting global demands and international quality standards.

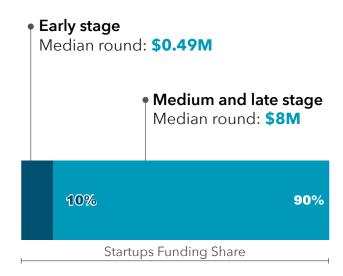
Lithuania's booming startup scene is celebrating its second unicorn - Nord Security. This Vilnius-based cybersecurity firm raised \$100M at a valuation of \$1.6B, making it Lithuania's second tech unicorn after Vinted, and opening promising new development opportunities for Lithuania.

The maturity of local startup ecosystems is reflected in the ways the community is self-organizing.

In addition to numerous gatherings and events, Lithuania's startup sector now has its own association – <u>Unicorns LT</u>, which seeks to accelerate ecosystem growth even further.

Fortunately for Lithuania, the public sector is extremely active in ecosystem promotion and development. With friendly business regulations, government support for funding, and an open data policy, Lithuania's public sector has created an environment that nurtures startups. Additionally, Startup Lithuania is promoting a Startup visa catering to foreign entrepreneurs and allowing a temporary residence permit for up to a year.

With salaries growing, tax payments up, and new investments flowing in, it's safe to say Lithuania's ecosystems are on a growth path.





In response to the results of the Index, the Head of Vilnius economic development agency, Inga Romanovskienė, said:

"We had the best year to date in 2021 attracting capital to our startups, and in 2022 we already saw one big exit and our second official unicorn, Nord Security. We pay a lot of attention to make sure everyone already in Vilnius can reach their full potential and those that aren't here already can move in quickly using services such as International House Vilnius. As new startups arrive every month and our startups continue to grow and succeed, the whole district in Vilnius is being shaped into a startup space."

# Notable Startups and Ecosystem Champions

⇒ Vinted Unicorn

Vilnius, Lithuania

Vinted is a Lithuanian online marketplace and community that allows its users to buy and sell.

→ Nord Security Unicorn

Vilnius, Lithuania

Nord Security operates as an internet privacy and security provider for individuals and businesses.

Hostinger

Kaunas, Lithuania

Hostinger is an employee-owned Web hosting provider and internet domain registrar.

**Our Ecosystem Partner** 





# Denmark experienced best momentum in the top 20.



After two years of stability, Denmark has surged in the Index. Now ranked 18th in the world, Denmark had the highest jump among the top 20 countries, getting closer to realizing its full potential. Regionally, the country remains 12th in Europe, 10th in the EU and 3rd in the Nordic region.

Within the country, there is positive news for three ecosystems. Firstly, Copenhagen jumped 8 spots to rank 53rd in the world, making real progress towards the top 50. Good momentum can be seen also in Aarhus, which increased by 15 places to rank 213rd. Hening accomplished a great performance by jumping 317 spots to 564th in the world and 5th in the country.

Some negative momentum can be seen in Odense (3rd nationally and 386th globally) and in Aalborg, which decreased by 10 spots to rank 516th. More unfortunate news, Kolding is no longer in the top 1000.

Denmark is represented at the industry level by Copenhagen, which ranks 24th in Hardware & IoT.

National Rank and Change	City	Global Rank and Change	Total Score	Overperforming Industry
1 -	Copenhagen	53 <sup>+8</sup>	13.149	Hardware & IoT
2 -	Aarhus	213 <sup>+15</sup>	3.819	
3 -	Odense	386 <sup>-32</sup>	1.278	
4 -	Aalborg	516 <sup>-10</sup>	0.685	
<b>5</b> <sup>+1</sup>	Herning	564 <sup>+317</sup>	0.563	



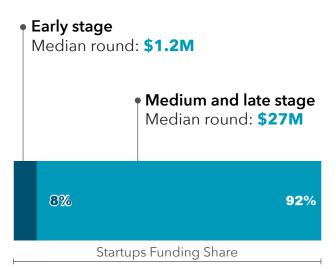
# **Startup Ecosystem Overview**

Denmark is well known as a progressive country with a high quality of life and talented entrepreneurs, backed by lean regulation that provides tax benefits and minimizes red tape. It's no coincidence that global leaders in various fields, like shipping giant Maersk, are based in Denmark; the potential of Danish entrepreneurs to lead global companies is high. Indeed, Danish founders are fully capable of building massive startups with global impact, evidenced by the success of Danish companies like Zendesk and Unity. When reaching maturity, however, such companies tend to move their operations to other countries, mainly the United States.

Denmark's capital, Copenhagen, connects Europe, Scandinavia, and the Baltic nations, creating a link to a market with more than hundred million consumers. Denmark is one of the best countries for doing business thanks to a safe business environment (minimal bureaucracy, great education, and transparent tax laws), world class innovation and technology, a focus on reducing emissions, superior quality of life, good social system, strong economy, and stable political landscape.

According to the European Commission, Denmark is regarded as an innovation leader in Europe, thanks to extensive research and development programs focused on innovation, entrepreneurship, and a pool of intelligent, aspiring people. Denmark is also the most digital country in Europe, and the home of many knowledge-intensive industries such as ICT, Life Science, and Cleantech.

Startups in Denmark have access to a range of both private and public funding opportunities.



Publicly funded initiatives include
Innovation Fund Denmark, which invests
in new initiatives to create growth and
employment, and The Danish Growth
Fund, aimed at promoting the creation
and growth of new companies through
investments, loans, and guarantees. The
Danish government has also initiated
Startup Denmark (a startup visa scheme)
as the one-point-of-entry for talented nonEU/EEA entrepreneurs to relocate and
grow high-impact start-ups in Denmark.

The Danish startup ecosystem, however, has yet to fulfill its true potential. Some of this missed potential can be attributed to increased focus on topics such as gender balance and employee rights, which are critical for established businesses, yet delay the growth of startups working in a chaotic environment. The Danish public sector is over-supportive of its entrepreneurs, even to the point of introducing them to investors and potential partners.



This is admirable, but does not necessarily build the character and spirit needed by great founders.

Outstanding innovation initiatives are happening in Denmark; One of the notable examples is the city of Odense, which has become a key innovation hub for robotics, drones, and automation, and has also caught the attention of international investors. We also recommend visiting Denmark for the growing regional tech event TechBBQ!

# Notable Startups and Ecosystem Champions

⇒ Pleo Unicorn

## Copenhagen, Denmark

Pleo offers smart payment cards for employees to buy work-related products while keeping the company in control of spending.

⇒ Lunar Unicorn (\*)

## Aarhus, Denmark

Lunar is a digital bank that offers a mobile-based banking app that helps consumers manage their personal finances.

## Dixa

## Copenhagen, Denmark

Dixa is a conversational customer engagement app that connects brands with customers through real-time communication.

## **Our Ecosystem Partner**



**Our Report Partner** 





# India has improved by one position to rank 19th.



India continues to improve its standings in the global index, now ranking 19th after an increase of one spot this year. India is the 4th highest ranked country in the Asia-Pacific region, after Singapore, Australia, and China. The gap between the total scores of India, Japan, and South Korea, which are ranked 4th, 5th, and 6th in Asia-Pacific respectively, is small. This signals a competitive environment for India, especially considering its massive population which is factored into its national rank.

India has the 2nd highest number of cities in the global top 20 with 3, a distinction it shares with China. Only the US has more cities ranked in the top 20 than India.

The Southern city of Bangalore continues to be the highest ranked city in India. It has strengthened its position in the top 10 and improved by 2 positions to rank 8th globally. It is also the 3rd highest ranked ecosystem in Asia-Pacific, after Beijing and Shanghai.

п	National Rank and Change	City	Global Rank and Change	Total Score	Overperforming Industry	
	1 -	Bangalore	8 +2	63.282	Edtech	
	2 -	New Delhi	13 <sup>+1</sup>	43.043	Transportation 🐧	
	3 -	Mumbai	17 <sup>-1</sup>	36.211	Edtech	
	4 -	Pune	90 <sup>+14</sup>	7.921	Transportation 💃	
	5 -	Hyderabad	97 <sup>+9</sup>	7.633	Edtech	
	6 -	Chennai	102 <sup>+31</sup>	7.148	Edtech	
	<b>7</b> +1	Jaipur	212 <sup>-17</sup>	3.856	Ecommerce & Retail	
	<b>8</b> <sup>-1</sup>	Ahmedabad	223 <sup>-47</sup>	3.647		



Bangalore overperforms in the Edtech industry with a global rank of 5. India is a strong player in the Edtech and Transportation industries globally, with several of its cities ranking well in those sectors.

While Bangalore's rank in the Asia Pacific region remained unchanged at 3rd, its relative position definitely improved. Last year, Shanghai's score was 66% better than Bangalore's score. Now, this gap has been reduced to less than 12%, thanks to the good performance of Bangalore and less impressive results in Shanghai. Consequently, Bangalore is now well-positioned to overtake Shanghai next year as the 2nd highest ranked city in the Asia Pacific.

The Indian capital of New Delhi is the 2nd highest ranked city in India, and 4th in the Asia Pacific. It has increased by 1 place to rank 13th globally. The gap between the scores of Bangalore and New Delhi was relatively small last year, but increased significantly in 2022, strongly positioning Bangalore as the top ecosystem in India. New Delhi is ranked 8th globally in the Transportation industry.

The financial hub of Mumbai has reduced slightly by 1 position to rank 17th globally. Mumbai is ranked 8th globally in the Edtech industry.

Two new cities from India have entered the top 100 to take the total count to 5: Pune at 90th and Hyderabad at 97th. Pune has seen an improvement of an impressive 14 spots and Hyderabad has seen an increase of 9 spots. Chennai is not far behind, with a massive jump of 31 spots to rank 102nd. The 2nd tier ecosystems of India have all seen healthy growth.

India has 32 cities in the 100-1000 range. Goa and Patna have seen the highest increase of ranking in India, 272 and 218 spots respectively, to rank 500th and 522nd. In total, 37 Indian cities are ranked in 2022, which puts India in the 7th position globally in regard to the number of ranked ecosystems per capita.

# **Startup Ecosystem Overview**

India is a country of great potential considering its population size and cost effectiveness in business operation. The country has established itself as a world leader in technology services and in the past few years, it saw a boom in unicorns. India's growth trajectory in the startup scene is truly impressive and can be attributed mainly to its domestic market size and a huge IT industry. India's startup ecosystem is not only a growth engine for its economy. If successful, startups will transform India's productivity and will change the country beyond recognition. Startups will also be the engine to transform India's informal economy into a transparent economy, which will allow the government the tax resources to finally make India the superpower that it has a potential to be. In order for this to happen, the public sector will have to choose its best and brightest to be on the task of startup economy development and strategy setting.

The talent of Indian entrepreneurs can be seen in their prominence as CEOs managing companies like Alphabet, Adobe and Microsoft. However, this also shows the massive cost of brain drain, as some of India's top talent is relocating to the West.

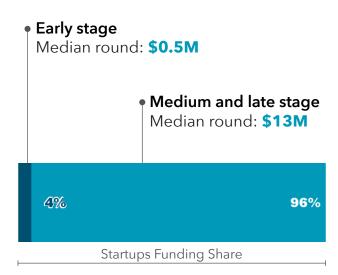


The scarcity of high paying jobs, coupled with India's infrastructural problems, are contributing to the entrepreneurial talent relocating overseas. Internet speed is low compared to most other countries, and power outages are frequent. The Indian government could take additional steps to improve this critical infrastructure and strengthen its startup ecosystem, as other countries in the region are growing fast. <a href="Startup India">Startup India</a>, the Government's flagship startup initiative, as well as <a href="Make in India">Make in India</a> signal the public sector's commitment to building the startup infrastructure.

The country is economically on the right path, and most of India's successful startups and unicorns are focusing on the massive potential of the local market. However, for India to achieve a status of a global tech hub, its startups will have to focus more on regional and global markets.

In recent years, the Indian startup scene has shifted the focus towards digital solutions and fintech, setting aside the previous ecommerce successes of unicorns like Flipkart and BigBasket. The US remains the biggest source of FDI for Indian startups, and investment is mainly flowing into fintech startups working on new models of banking, like neobanking. The COVID-19 pandemic resulted in a rise of venture capital for digital solutions in healthcare and education.

Considering that India enjoys good ties with most of the world, we are optimistic about its chance to continue to grow and assume a bigger role in the global startup ecosystem. When considering India's core advantage of an educated, young, English-speaking population, the country's potential is immense.





# Notable Startups and Ecosystem Champions

**○ OYO Rooms** Unicorn **(\*)** 

## Gurgaon, India

Oyo Rooms, also known as Oyo Hotels & Homes, is an Indian hospitality chain of leased and franchised hotels, homes and living spaces.

⇒ Razorpay Unicorn

### Bangalore, India

Razorpay is a platform that helps businesses accept, process and disburse payments.

**○ OfBusiness** Unicorn **(\*)** 

## Gurgaon, India

OfBusiness is a tech-enabled platform that facilitates raw material procurement and credit for SMEs.

## **Pantheons**

## Flipkart

### Bangalore, India

Flipkart operates an online shopping website.

## **⇒** BYJU'S

## Bangalore, India

BYJU'S is an educational technology company that developed an online tutoring app.

## Infosys

## Bangalore, India

Infosys is a multinational corporation that provides business consulting, information technology and outsourcing services.

## **Our Ecosystem Partners**





## **Our Report Partners**











# Japan rejoins the global top 20.



Japan enters the global top 20 for the first time since its debut in 2017, overtaking South Korea. With a better Quantity and Business score than India (ranked 19th), Japan shows much promise. Within the Asia Pacific region, Japan ranks 5th, between India and South Korea.

The Tokyo-Yokohama Area remains stable globally and dominant nationally. This ecosystem is 15th in the world, far ahead of Osaka which ranked 119th despite positive momentum this year. Although the gap in ranking between Tokyo-Yokohama and Osaka decreased, there

is an increase in the gap between the two cities' achievements, as reflected by their total score. When looking at the gaps between Tokyo-Yokohama and Osaka, there is a difference of over 6 times compared to over 5 times in 2021. The Tokyo-Yokohama Area is a leader in Hardware & IoT where it ranks 8th in the world.

Osaka excels in the same industry, ranked 33rd in the world.

ľ	National Rank and Change	City	Global Rank and Change	Total Score	Overperforming Industry
	1 -	Tokyo-Yokohama Area	15 -	37.490	Hardware & IoT
	<b>2</b> <sup>+1</sup>	Osaka	119 <sup>+9</sup>	6.098	Hardware & IoT
	<b>3</b> <sup>-1</sup>	Kyoto	182 <sup>-58</sup>	4.511	Energy & A
	4 -	Fukuoka	220 <sup>+20</sup>	3.684	
	<b>5</b> <sup>-</sup>	Nagoya	279 <sup>-33</sup>	2.403	
	6 new	Sendai	394 <sup>new</sup>	1.242	
	7 -	Sapporo	571 <sup>+197</sup>	0.549	
	8 -	Tsukuba	694 <sup>+215</sup>	0.390	



Kyoto (ranked 182nd) is still in the top 200 despite negative momentum. To regain its national rank, Kyoto will need to create startups with higher impact. It would be wise to leverage its best ranking industry, Energy & Environment.

There is positive momentum in Fukuoka, which ranked 220th, increasing 20 spots. Jumping by 197 spots and 215 spots, Sapporo and Tsukuba now rank 571st and 694th respectively. There are also some notable achievements from Japan's debuting startup ecosystems. Sendai (ranked 394th globally) jumped to rank 6th nationally, and Naha (ranked 856th) is ranked 10th nationally. We would also like to welcome Okayama, now ranked 911th in the world, bringing the total number of Japan's ecosystems in the top 1000 to 11. To further strengthen its global positioning, Japan should aim at having a second city in the global top 100.

# **Startup Ecosystem Overview**

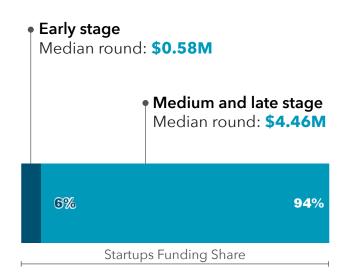
With a proven record of innovation, Japan is a tech pioneer. Apart from its historic success in building global companies such as Sony and Panasonic, the country also recognizes the importance of startups. However, the shift from building massive industrial consumer electronics and automobile companies towards startups is a difficult one. Like other economies in the region, a risk averse mindset is a challenge for the growth of Japan's startup economy, in addition to a need to improve English skills to allow entrepreneurs to target international markets. The abundance of high-quality corporate jobs and a tight job market are creating a scarcity of talented and

motivated entrepreneurs. With an aging population, Japan could benefit from attracting more foreign talent.

The low number of unicorns could signal a lack of investment in the startup ecosystem. Yet interestingly, a daring and revolutionary VC venture is based in Japan. Softbank, led by Masayoshi Son, has had its ups and downs but has made a massive impact on the landscape of global investment. Japan is managing to gradually advance its startup economy with more investment and a mindset change of encouraging entrepreneurship, mainly boosted by a government that fully understands the importance of successful and innovative startup ecosystems. With support from the government, the <u>J-Startup Program</u> has set out to promote Japanese startups to the global market and to help create 20 unicorns by 2023. The Japan External Trade Organization (JETRO) is also helping startups go global by setting up the Startup City Acceleration Program. Japan's clear strategy of creating competitive startup ecosystems shows that the country is moving in the right direction. Japan's Startup Visa is already being implemented in a number of locations, such as Fukuoka City and Kobe City.

The Japanese government has been active in Japan's startup economy development with the promotion of Tokyo, Yokohama, Fukuoka, Kyoto, and Kansai as leading startup cities, in addition to state sponsored funding and accelerator programs for startups. With fintech and healthtech showing a lot of promise in Japan, we hope to see the country's startup ecosystems attract global recognition.





# Our Ecosystem Partners













# Notable Startups and Ecosystem Champions

⇒ Playco Unicorn

## Tokyo, Japan

Playco is an instant gaming company, focused on building games that people can play together without any additional app downloads.

**⇒ SmartNews** Unicorn **(\*)** 

## Tokyo, Japan

SmartNews is a news app that helps users find quality news beyond the filter bubble.

⇒ Spiber Unicorn

## Tsuruoka, Japan

Spiber is a biotech company developing microbially-fermented Brewed Protein  $^{\text{TM}}$  for a more sustainable society.

## **Pantheons**

## Softbank

### Tokyo, Japan

SoftBank is a Japanese multinational conglomerate holding company which focuses on investment management.

## Sony

#### Tokyo, Japan

Sony develops and manufactures audio, video, communications, and information technology products for consumer and professional markets.

#### Panasonic

## Osaka, Japan

Panasonic Corporation is one of the largest electronic product manufacturers in the world.



Please refer to the ecosystem case study section to read a <u>detailed analysis</u> <u>of Kyoto</u>'s and <u>Yokohama's startup ecosystem</u>.

# 21 | South Korea

# South Korea is no longer in the top 20.



After 3 consecutive years of stability, South Korea experienced a slight loss in momentum after decreasing by 2 spots to rank 21st. While South Korea has better Quality and Business scores than Japan (ranked 20th), the country should develop more seed ecosystems to regain its position. Within Asia, South Korea dropped two places to rank 5th, having been overtaken by India and Japan.

Seoul still enjoys a top 10 position both in Asia and in the Asia Pacific region, where it ranked 9th. Globally, Seoul decreased slightly to 25th, having been overtaken by two

strong ecosystems: Stockholm and Toronto. This is still a relatively strong position in a very competitive tier. Seoul maintains dominance nationally and is the only South Korean city ranked in the top 200. This loss is due to Busan falling out of the top 200 after decreasing 45 spots this year.

On the other hand, there are good signs coming from Daejeon at 421st and Incheon at 794th, both improving 136 and 46 positions respectively. The country is best represented in Hardware & IoT by Seoul, which ranks 12th in this industry.

п	National Rank and Change	City	Global Rank and Change	Total Score	Overperforming Industry	1
	1 -	Seoul	25 <sup>-2</sup>	30.111	Hardware & IoT 🎉	
	2 -	Busan	207 <sup>-45</sup>	3.906		
	3 -	Daejeon	421 <sup>+136</sup>	1.099		
	<b>4</b> <sup>+1</sup>	Incheon	794 <sup>+46</sup>	0.276		
	<b>5</b> <sup>-1</sup>	Gwangju	980 <sup>-225</sup>	0.267		



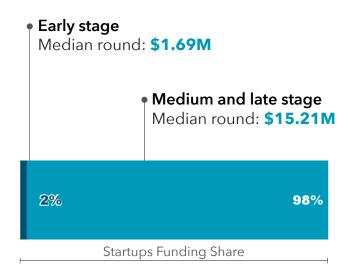
# **Startup Ecosystem Overview**

South Korea is a nation with a proven track record of building outstanding global corporations while also creating an impressive amount of tech unicorns, such as the ecommerce site Coupang. The country's biggest advantage is the number of global companies (such as Samsung and LG) that can potentially provide investment and support to local entrepreneurs. International companies have also recognized the startup potential of South Korea's startup scene and established a presence with initiatives such as Google Campus and Innovation Lab Korea, powered by Facebook.

On the other hand, the corporate culture paired with an abundance of high quality, respectable jobs might also keep potential entrepreneurs working as employees instead of venturing to build their own startups. The government is well aware of this challenge, and is investing heavily in startups, as well as creating regulatory sandboxes that decrease legal risks for entrepreneurs. Second chance startup initiatives have also been established as a measure of minimizing the cost of failure for entrepreneurs and providing support through incubation and mentorship. South Korean startups benefit from some of the most forward thinking and comprehensive government support in the world. Foreign entrepreneurs looking to benefit from this support are welcomed and encouraged by the OASIS Visa and by a number of dedicated support facilities. The public sector is covering a lot of ground by supporting SMEs and startups. The Government's long established Korean "Fund of Funds" is worth billions, and has become a critical

component of the startup ecosystems of South Korea. At the same time, the private sector is doing its share too, with VCs investing more and more every year.

While steps have been taken in the right direction, the main challenge for South Korea remains encouraging potential entrepreneurs to embrace risk and create startups as an alternative path to the norm of climbing the corporate ladder. Mindsets are beginning to change, especially in younger generations who are more prone to innovation and risk taking.





# Notable Startups and Ecosystem Champions

Seoul, South Korea

Kurly is a food delivery and logistics platform that enables users to order food via the website and receive it the following morning.

⇒ Socar Unicorn (\*)

Jeju-do, South Korea

Socar is a Korean eco-friendly car sharing community that allows travelers to share cars with others who are traveling the same route.

→ Dunamu Unicorn

Seoul, South Korea

Dunamu provides a wide range of innovative services with a focus on fintech and blockchain.

## **Pantheons**

## Samsung

Seoul, South Korea

Samsung is a South Korean multinational manufacturing conglomerate representing the largest South Korean chaebol.

**⇒** LG

Seoul, South Korea

LG is a multinational company that makes electronics, chemicals, and telecom products.

Kakao Corporation

Jeju-do, South Korea

Kakao is a mobile lifestyle platform offering services ranging from messaging, news, advertising, gaming, e-commerce, and music.

## **Our Ecosystem Partner**



**Our Report Partner** 

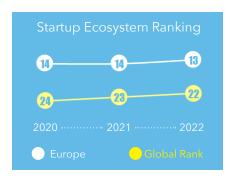
DISTEP 대전과학산업진흥원



Please refer to the ecosystem case study section to read a <u>detailed analysis</u> <u>of Seoul's startup ecosystem.</u>



# Brussels entered the top 60 globally as Belgium's front runner.



Belgium continues its path of moderate growth, increasing 1 more spot this year to rank to 22nd globally and 13th in Europe. In the EU, the country is getting closer to the top 10, ranking 11th.

Brussels entered the top 60 after a substantial jump of 13 spots, ranking 59th, in what is one of the most significant increases among EU cities this year. Consequently, progress has been made in the city's EU rank, where it rose 4 spots to 11th. Ghent remains a considerable distance from Brussels, but jumped 9 spots to rank 149th, and is

Belgium's second representative in the top 200.

Among the national top 10, there has been negative momentum. Antwerp is ranked 255th after decreasing 18 spots and Leuven and Liege have both lost 16 spots to rank 327th and 406th respectively.

There are several new additions in Belgium's rankings that performed particularly well. First, Charleroi jumped straight to 6th nationally and 384th globally. Next in line is Kortrijk, now ranked 7th nationally and 553rd globally.

ı	National Rank and Change	City	Global Rank and Change	Total Score	Overperforming Industry
	1 -	Brussels	59 <sup>+13</sup>	10.534	Software & Data 檱
	2 -	Ghent	149 <sup>+9</sup>	5.160	Healthtech <b>B</b>
	3 -	Antwerp	255 <sup>-18</sup>	2.902	
	4 -	Leuven	327 <sup>-16</sup>	1.687	
	<b>5</b> <i>new</i>	Charleroi	384 <sup>new</sup>	1.302	
	<b>6</b> <sup>-1</sup>	Liege	406 <sup>-16</sup>	1.159	
	<b>7</b> new	Kortrijk	553 <sup>new</sup>	0.587	
	<b>8</b> <sup>+1</sup>	Mechelen	590 <sup>+257</sup>	0.518	



We would also like to congratulate Mechelen for the jump of 257 spots globally, entering the top 600. In addition, Houthalen-Helchteren made its debut in the top 1000, bringing the country's total number of ranked cities to 11. Due to this significant momentum, Hasselt and Aslst have both lost 1 point in the national rankings.

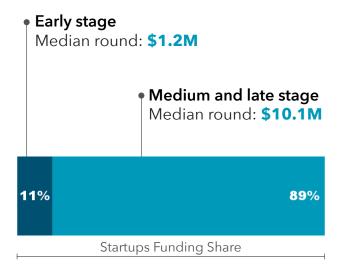
Belgium's ecosystems rank in the top 50 for 2 industries. Brussels is ranked 43rd for Software & Data while Ghent excels in Healthtech, where it ranks 42nd.

In the coming years, Belgium is preparing the digital transformation of its public and private sectors. Together with Microsoft, the Belgian government announced the Digital AmBEtion, an investment plan that aims to have a positive impact on the economy and the startup landscape of the country.

# **Startup Ecosystem Overview**

In 2020, Belgium joined the unicorn club with Collibra, a data intelligence platform. This major milestone for the ecosystem opened the way to other success stories, such as Odoo and Deliverect. Belgium, from its capital of Brussels, is the nerve center of the EU, creating an advantage for local startups that are close to major regional initiatives. While the country does not yet have a Startup Visa, it did set up an attractive Immigrant Entrepreneur Program which allows foreigners to invest in or set up a business in Belgium.

Helping the growing Belgium startup community is the country's largest accelerator, Start it @KBC, which offers startups the support they need to scale internationally. Thanks to the country's geography, which hosts most of the EU institutions as well as Europe's second largest maritime port in Antwerp, startups in Belgium are well positioned to expand into European and international markets.





# Notable Startups and Ecosystem Champions

→ Collibra Unicorn (\*)

Brussels, Belgium

Collibra is a governance data analytics solutions platform.

→ Odoo Unicorn

Louvain-la-Neuve, Belgium

Odoo offers an integrated suite of business apps built through an open-source development model

⇒ Deliverect Unicorn

Ghent, Belgium

Deliverect integrates online orders from food delivery channels into restaurants' POS to improve their operational flow.

## **Our Ecosystem Partners**



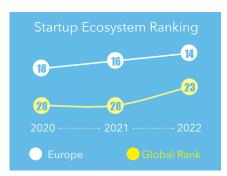




Please refer to the ecosystem case study section to read a <u>detailed analysis of Angwerp's startup ecosystem</u>.



# Austria gets closer to the top 20 after jumping 5 spots.



Austria has had an impressive year, jumping 5 spots to rank 23rd. This brings the country closer to the highly competitive environment of the top 20. However, the differences in scores among countries ranked 23rd-25th are minimal. Austria also has improved its position in the EU, where it now ranks 12th. This positive momentum on the country level can be explained by Vienna's substantial increase in the top 100.

With an impressive 14 spot jump to position 71, Vienna has widened the gap with Austria's 2nd tier startup ecosystems. The city is the only ecosystem in Austria in the top 200 and the only one to show positive momentum this year. Vienna also ranks well in the EU, where it placed 14th. The ecosystem is ranked 18th in the world in Edtech, its highest performing industry.

The gap in total score between Vienna and Austria's 2nd ranked city, Graz, is massive. Graz decreased 49 spots to rank 251st while Linz decreased by 13 spots to rank 320th. The most notable losses were suffered by Salzburg (ranked 491st), Innsbruck (ranked 725th), and Klagenfurt am Wörthersee (ranked 816th).

National Rank and Change	City	Global Rank and Change	Total Score	Overperforming Industry
1 -	Vienna	71 +14	9.449	Edtech
2 -	Graz	251 <sup>-49</sup>	2.929	
3 -	Linz	320 <sup>-13</sup>	1.769	
4 -	Salzburg	491 <sup>-83</sup>	0.762	
5 -	Innsbruck	725 <sup>-120</sup>	0.339	
6 -	Wiener Neustadt	792 <sup>new</sup>	0.278	
<b>7</b> new	Klagenfurt am Wörthersee	816 <sup>-116</sup>	0.257	



We would like to congratulate Wiener Neustadt for making its debut on the Index at 6th nationally, and 792nd globally.

# **Startup Ecosystem Overview**

Austria's startup economy is focused on the fields of information technology, media, and life science as well as creative industries.

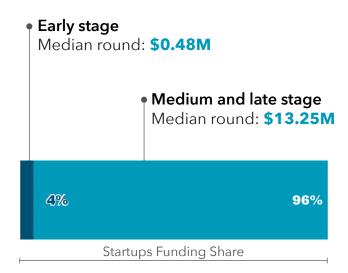
We believe Austria has the potential to become a powerful European startup hub. The capital, Vienna, attracts many young people across Europe due to its quality of life, culture, and relatively sustainable cost of living compared to other Western European cities. Austria also offers entrepreneurs an investment friendly tax system and a support network for acquiring funding. For instance, the ministry of economics has been working to simplify the process of starting a new business by putting forward the socalled New Companies Promotion Act (NeuFöG). In addition, organizations such as ABA-Invest in Austria are doing a great job of promoting the nation as an ideal location for early stage funding and government support.

Austria has a vast supporting network of early-stage investors, incubators, accelerators, angels, and VCs based in Austrian StartUps, the Austrian Angel Investors Association and the Austrian Venture Capital and Private Equity Organisation. One of Europe's most active VCs, Speedinvest, is headquartered in the Austrian capital. The most important funding sources in Austria are the Austrian Research Promotion Agency (FFG) and Austria Wirtschaftsservice (AWS). They

offer non-repayable grants, guarantees or subsidized loans.

With such strong support for startups, it is no wonder that Austrian unicorns, GoStudent and Bitpanda, have attracted strong international attention, putting Austria on the map of international investors. All these recent public sector activities are welcomed, especially those focused on promotion and branding of the Austrian startup ecosystem. The previous approach of relying on "the product" of Austria's R&D capabilities has lacked effective marketing, resulting in missed opportunities and substantial losses, such as the inability to continue the iconic Pioneers startup event in Vienna after 2019.

Austria enjoys a central location in the heart of Europe where it can act as a bridge between numerous markets to the West (including Germany and Switzerland, which share a language) and the East (including Slovakia, Slovenia, and Croatia, all an hour away). In the future, we hope to see Austria better able to capitalize on such strategic advantages.





# Notable Startups and Ecosystem Champions

⇒ Bitpanda Unicorn

Vienna, Austria

Bitpanda is a centralized crypto exchange that provides users access to digital assets.

**⇒** GoStudent Unicorn **(\*)** 

Vienna, Austria

GoStudent is a digital platform that connects students to teachers in a virtual learning environment.

→ Refurbed Unicorn

Vienna, Austria

Refurbed is a marketplace for refurbished electronics.

## **Our Ecosystem Partner**





# Norway is closing the gap on other Scandinavian countries.



Norway is definitely one of the stars of the Index 2022, recording a jump of 7 spots to 24th globally, which represents the biggest increase among the global top 30. Norway is still the lowest ranked Scandinavian country, but is closing the gap on Denmark at 18th. Among European countries, it ranks 15th and still has a way to go to become a major regional hub.

Norway has significant growth in its Quality score with 4 new unicorns in the country. It ranks 17th worldwide for

Business score, showing that Norway offers a good entrepreneurial climate to founders. However, Sweden, Denmark, and Finland rank 1st, 3rd, and 4th for Business score, showing that Norway still has a long way to go before closing the gap with these countries. Norway's climb up the Index can be attributed to excellent results in three of four cities that were already ranked in 2021, Oslo, Stavenger and Bergen, as well as to the growing diversity of the country's startup scene.

National Rank and Change	City	Global Rank and Change	Total Score	Overperforming Industry
1 -	Oslo	72 <sup>+27</sup>	9.398	Ecommerce & Retail
<b>2</b> <sup>+1</sup>	Stavanger	198 <sup>+178</sup>	4.247	Hardware & IoT
<b>3</b> <sup>+1</sup>	Bergen	332 <sup>+119</sup>	1.651	
<b>4</b> <sup>-2</sup>	Trondheim	373 <sup>-6</sup>	1.381	
<b>5</b> new	Halden	738 <sup>new</sup>	0.327	
6 new	Kristiansand	791 <sup>new</sup>	0.279	
<b>7</b> new	Steinkjer	810 <sup>new</sup>	0.263	
8 new	Fredrikstad	825 <sup>new</sup>	0.251	



Oslo is still ranked 1st nationally and retains a large gap from other Norwegian cities. After entering the top 100 last year, it has now advanced to 72nd globally, rising 27 places in the overall rankings. Oslo is the 9th highest ranking city in Northern Europe. It is in the top 100 globally for several industries, ranking highest in Ecommerce & Retail at 32nd.

Stavenger proved to be a national leader in Hardware & IoT, ranking 42nd globally. At 2nd place nationally, Stavanger increased by an impressive 178 spots to 198th globally, entering the global top 200. At the same time, Bergen jumped 119 spots to 332nd. Both cities surpassed Trondheim, now ranked 4th nationally after a decrease of 6 spots to 373rd globally. Trondheim is the only Norwegian city that saw a decrease, losing its place as Norway's second highest ranked ecosystem.

Norway's startup scene has become much more diverse with 5 new Norwegian cities entering the top 1000: Halden, Kristiansand, Steinkjer, Fredrikstad, and Haugesund, settling in the 700 - 900 tier. With these new reinforcements on the Index, Norway more than doubled its number of cities in the global top 1000, which is a commendable achievement. A higher number of successful ecosystems in a country is a sign of maturity.

# **Startup Ecosystem Overview**

The Norwegian startup ecosystems are highly collaborative, with a strong network of both public and private sector stakeholders. The country also benefits from a high level of technology and innovation while prioritizing assistance to

startups and entrepreneurs via a robust public sector support system. Norway has a long tradition of private-public partnerships in business initiatives. The government not only takes a stake in large corporations, but invests in small businesses and startups all around the country through different funds and organizations.

Noteworthy examples are <u>Innovasjon</u>
<u>Norge</u>, an organization stimulating innovation and entrepreneurship, as well as <u>Investinor</u>, a well-known and active startup investment company funded by the Norwegian government.

The ecosystem has drastically improved recently, as both foreign and domestic entrepreneurs and investors have discovered the opportunities and excitement of the Norwegian startup landscape. More money was invested in Norwegian tech companies in 2021 than ever before, marking record values in VC deals and funding rounds.

Nevertheless, Norway is still underperforming compared to other Scandinavian countries like Sweden, which started developing their startup ecosystems as strategic assets decades ago. Further, the stability and security of the Norwegian economy sometimes discourages risk-taking. The country has a small population of roughly five million people, which limits its talent pool and incentivizes talent acquisition from other countries. Norway also has one of the highest costs of living in the world, and lags behind its Nordic peers in terms of private investment into the tech sector. This does not mean that there are no startup success stories.



In fact, Norway celebrated 2021 with its first three unicorns: Gelato, Cognite and Oda. Earlier in 2022, Dune Analytics joined the Norwegian unicorn club as well, signaling that Norway's tech sector has undergone rapid growth in recent years.

Overall, Norway is a rich country with a stable economy, a talented employment pool, and an extensive social safety net. It is also important to celebrate the high female participation in startup teams, and Norway's strong orientation toward a greener economy. All these factors increase the incentives for entrepreneurship even when considering the substantial associated costs.

# Notable Startups and Ecosystem Champions

Lysaker, Norway

Cognite develops an industrial IoT data platform that enables digital transformation of heavy-asset industries.

→ Oda Unicorn

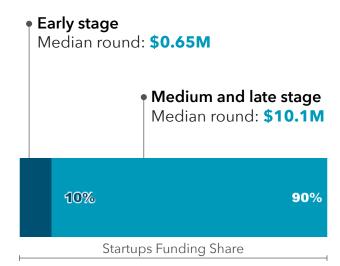
Oslo, Norway

Oda is an online grocery retailer that provides door-to-door delivery services.

**⇒ Gelato** Unicorn **(\*** 

Oslo, Norway

Gelato is a printing platform that offers customized print products for global ecommerce sellers.



# 25 Taiwan

# Taiwan enters the top 25 globally.



Taiwan continues its trajectory toward the top. The country advanced one spot on the Index to enter the global top 25. Taiwan is extremely close in total score with Norway (24th) and Austria (23rd). In the Asia Pacific region, Taiwan remains stable at the 7th position.

Ranked 47th, Taipei is still in the highly competitive top 50 cities, despite negative momentum. There is positive news for the Hardware & IoT industry in Taipei, which advanced to rank 7th in the world. Taipei is the 15th highest ranked

ecosystem in the highly competitive Asian Pacific region.

Taiwan's increase in ranking can be attributed not only to Brazil's decline but also to several 2nd and 3rd tier Taiwanese ecosystems which all substantially improved in rank. This is proof that ecosystems around the country are becoming stronger and getting closer to the country's leading hub. Hsinchu advanced 89 places and entered the global top 200 club at 196th position. Hardware & IoT is astonishingly strong in Hsinchu, where it ranks 23rd in the world.

There are also major achievements coming from Taoyuan City (ranked 440th, up 70 spots), Tainan City, (ranked 586th, up 163 spots), Taichung City (ranked 614th, up 256 spots), and Kaohsiung City (ranked 726th, up 178 spots).

National Rank and Change	City	Global Rank and Change	Total Score	Overperforming Industry	
1 -	Taipei City	47 <sup>-6</sup>	14.955	Hardware & IoT 🏌	
2 -	Hsinchu	196 <sup>+89</sup>	4.309	Hardware & IoT	
3 -	Taoyuan City	440 <sup>+70</sup>	0.959		
4 -	Tainan City	586 <sup>+163</sup>	0.528		
5 -	Taichung City	614 <sup>+256</sup>	0.481		
6 -	Kaohsiung City	726 <sup>+178</sup>	0.339		



All these ecosystems prove that the Taiwanese startup scene is not limited to Taipei.

# **Startup Ecosystem Overview**

Taiwan has a history of being a nation of innovation; many of the world's manufactured goods were produced here before China opened its doors to the global economy. During the COVID-19 pandemic, the country continued on its growth trajectory thanks to both the global demand for tech exports and Taiwan's judicious containment policies.

Taiwan has many large and impressive tech companies, like Foxconn and Asus, giving the ecosystem a unique edge in anything Hardware-related. The most strategic Taiwanese corporation is the impressive TSMC, the world's most valuable semiconductor company.

Aligned with the historic success of Taiwan's global companies, the country's shift in focus toward startups is seeing positive results. Various leading government organizations, such as the Taiwan Tech Arena, are investing heavily in developing and promoting the country's startup ecosystem with initiatives such as the Employment Gold Card and the Entrepreneur Visa, both aimed at attracting foreign talent.

Taiwan focuses on global integration with other startup ecosystems since its local market is too small for startups to focus solely on domestic solutions, unlike high population countries such as India and China. In 2021, Appier became Taiwan's first digital unicorn as well as its first exit after going public on the Tokyo Stock Exchange. After this milestone, more startups have achieved unicorn status: Gogoro, Just Kitchen, and 91App. The tech presence is represented by global giants such as Google and Microsoft who have opened data and research centers in Taiwan.

One of the challenges Taiwan faces now is to change its focus from a hardware-based economy to becoming a knowledge and information hub. While the country implements more policies to encourage entrepreneurship, we hope to see more people forgo safe, guaranteed jobs and embrace entrepreneurism. As more Taiwanese startups become successful, mindsets will shift to create a critical mass of successful startups that will choose to scale and go global. It is also a positive sign for the appeal of the country to see leading tech figures based in Taiwan, including co-founder of Youtube Steve Chen and tech thought leader Ben Thompson from Stratechery.



# Notable Startups and Ecosystem Champions

## KKday

## Taipei, Taiwan

KKday is an ecommerce travel platform connecting travelers with local experiences around the world.

## Vpon

## Taipei, Taiwan

Vpon is a data ad technology company offering data-centric advertising solutions.

## M17 Entertainment

## Taipei City, Taiwan

M17 Entertainment integrates instant audio and video into life through its flip action technology.

## **Pantheons**

## **⇒** ASUS

## Taipei City, Taiwan

ASUS is a tech company which produces computers, laptops, mobile phones, and hardware.

## **⇒** Acer

## New Taipei City, Taiwan

Acer is a multinational hardware and electronics corporation.

## TSMC Taiwan

### Hsinchu, Taiwan

TSMC Taiwan is the world's most valuable semiconductor foundry.

## **Our Ecosystem Partner**

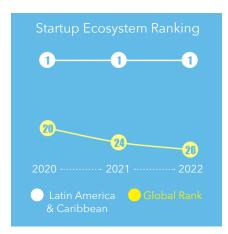




Please refer to the ecosystem case study section to read a <u>detailed analysis</u> <u>of Taipei's startup ecosystem</u>.



# Brazil remains the top country in LATAM, as São Paulo climbs up the rankings.



Brazil managed to slow down its negative momentum which started in 2021, although the country still dropped 2 spots to rank 26th. However, Brazil maintains its position as the dominant and top-ranked country in the Latin American region.

Despite the country's decline, São Paulo rose 4 spots to rank 16th globally. This is an outstanding achievement, as no other Latin American city ranks in the top 40. The São Paulo ecosystem truly overperforms in Fintech, where it ranks 4th in the world. Curitiba, 2nd nationally, ranks 141st globally after a 3 spot increase. Both São Paulo and Curitiba maintain their positions as Latin American leaders, ranked 1st and 7th respectively.

In stark contrast to the positive momentum of Brazil's top 2 startup cities, all other ecosystems in the national top 12 have decreased substantially.

ı	National Rank and Change	City	Global Rank and Change	Total Score	Overperforming Industry	
	1 -	São Paulo	16 <sup>+4</sup>	36.655	Fintech	
	2 -	Curitiba	141 <sup>+3</sup>	5.243	Ecommerce & Retail	
	<b>3</b> <sup>-</sup>	Rio de Janeiro	180 <sup>-32</sup>	4.521	Edtech	
	4 -	Belo Horizonte	215 <sup>-61</sup>	3.789		
	5 -	Porto Alegre	240 <sup>-52</sup>	3.196		
	6 -	Florianopolis	322 <sup>-52</sup>	1.742		
	<b>7</b> <sup>+4</sup>	Recife	468 <sup>-7</sup>	0.824		
	<b>8</b> <sup>-1</sup>	Brasilia	520 <sup>-181</sup>	0.666		



In 2021, Brazil had 5 cities in the global top 200; this year, it has only 3. Rio de Janeiro decreased by 32 spots to 180th while Belo Horizonte decreased by 61 spots to 215th. Rio de Janeiro, still in the top 10 for Latin America at 9th, has lost one spot since last year. Overall, the country had 32 ecosystems last year in the top 1000. This number fell to 24 this year, and only 7 of these cities are in the top 500, compared to 12 in 2021. This steep, country-wide decline, combined with São Paulo's rise, may suggest that São Paulo attracts so much talent, investment and attention, leaving insufficient ingredients for success in many other regions in the country.

In response to the results of the Index, the Mayor of Curitiba, Mr. Rafael Greca, said:

"Curitiba has all it takes for a vibrant startup ecosystem: high skilled labor, great universities, diversity of industries, bold entrepreneurs and an innovative spirit that spreads all over Pinhão Valley, our collaborative movement for innovation. We celebrate our position in the 2022 Global Startup Ecosystem Index, which motivates us to work harder, to grow even more and to deliver the benefits of innovation to every citizen."

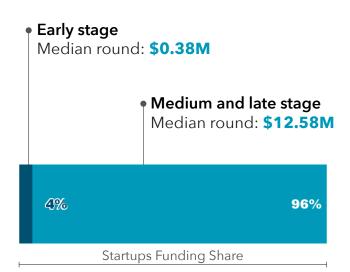
# Startup Ecosystem Overview

Brazil is a leading Latin American startup economy due to its massive size and market potential. Despite having a difficult year amid the COVID-19 pandemic, Brazil's startup ecosystems managed to attract record funding, particularly in seed rounds.

In addition, Brazil continues to produce notable unicorns, such as Nuvemshop, Olist, and MadeiraMadeira. Large corporations contribute to the favorable startup climate by providing accelerator programs and incubators as well as strong funding opportunities.

Brazil still has low hanging fruits for greatly improving its startup economy. Reducing high interest rates, improving the level of English, and executing much needed business reforms will unlock the country's potential. It's encouraging to see public policy initiatives such as <a href="InvoAtiva Brasil">InvoAtiva Brasil</a>, StartOut Brasil, and <a href="Capital Empreendedor">Capital Empreendedor</a>, as well as new legal frameworks for startups that are aimed at supporting and promoting startup expansion.

For Brazil to maintain its startup ecosystem development and encourage more startups, public institutions should keep focusing on promoting the country to foreign investors and entrepreneurs. The fact that foreigners can now access an Investor Visa indicates that the country is making progress.





In addition, Brazil could benefit from further developing startup ecosystems in more cities across the country to foster innovation outside of Brazil's major hubs.

Considering the vast potential of the market and a population of more than 200 million people, Brazil's tech ecosystem meets all the prerequisites for rapid growth. This is demonstrated by a growing number of unicorns, most of which cater to the local market. We can only hope the pro-business climate endures while Brazil maintains, protects, and leverages the unique natural resources of this beautiful country to expand the reach of its startups beyond the local market.

# **Notable Startups and Ecosystem Champions**

⇒ iFood Unicorn (\*)



## São Paulo, Brazil

iFood is an on-demand food delivery company which uses innovative technology

## ⇒ Nuvemshop Unicorn €



#### São Paulo, Brazil

Nuvemshop provides SMBs in Latin America with the tools to set up, manage, and promote their online business.

### 



#### Curitiba, Brazil

MadeiraMadeira is an online marketplace that specializes in home products.

## **Pantheons**

## Nubank

#### São Paulo, Brazil

Nubank is a neobank and the largest financial technology bank in Latin America.

## Contabilizei

### Curitiba, Brazil

Contabilizei is a financial back-office platform for SMBs, facilitating business formation, tax filing, and accounting.

## Contraktor

#### Curitiba, Brazil

Contraktor is a management platform that allows companies to create, negotiate, sign, and manage legal contracts.

## **Our Ecosystem Partners**









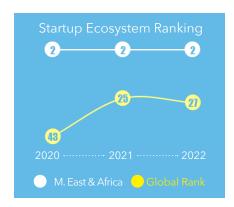
## **Our Report Partners**





# 27 | UAE

## Dubai is now 2nd in the Middle East.



The UAE dropped two places this year to rank 27th in the world. However, the country remains in the global top 30 and keeps its position as 2nd in the Middle East. Between the global ranks of 26th and 29th, the UAE finds itself in a very competitive environment, with close scores that could easily shuffle the rankings next year.

Nationally, the city of Dubai (ranked 61st) had positive momentum, increasing 6 spots. This increase also means Dubai has surpassed Jerusalem to become the second highest ranked city in the Middle East after Tel Aviv.

While Dubai is a strong ecosystem, it is the only UAE city in the global top 100. The other two ranked ecosystems in the country, Abu Dhabi at 171st and Sharjah at 898th, have both decreased this year, 2 spots and 176 spots respectively. The UAE could benefit considerably from bringing more of its ecosystems closer to the top, while making sure Dubai continues to excel and transform itself into a global startup hub.

# **Startup Ecosystem Overview**

The UAE is becoming a powerful regional entrepreneurship hub, with its main startup ecosystem in Dubai leading the way. Boasting a high concentration of technological innovation, Dubai is a hub for innovation in the Arab world and a popular relocation destination for ambitious Arab entrepreneurs across the MENA region. Abu Dhabi is also becoming an accomplished and successful startup ecosystem hub, and is home to multiple accelerators and incubators as well as a large local market.

п	National Rank and Change	City	Global Rank and Change	Total Score	Overperforming Industry	
	1 -	Dubai	61 <sup>+6</sup>	10.328	Foodtech	
	2 -	Abu Dhabi	171 <sup>-2</sup>	4.716		
	<b>3</b> <sup>-</sup>	Sharjah	898 <sup>-176</sup>	0.199		



Other emirates, such as Sharjah and Ras al Khaimah have the potential to also create their own successful ecosystems.

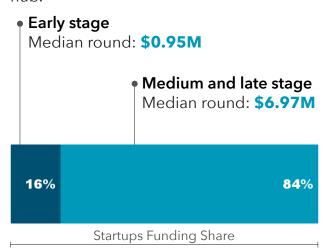
An example of UAE potential is the successful exit of Careem, which was sold to Uber for over \$3 billion, the first unicorn in the Middle East outside of Israel. Other UAE headquartered startups like Kitopi have since joined the unicorn club. Considering the size of the Arab-speaking market, potential is high, and the public sector should prioritize preparation for a future era when oil revenue will decline.

Continued business reforms by the government can provide much needed legal and financial infrastructure, such as laws that favor entrepreneurs and a banking system that supports innovation. The update to bankruptcy law was a step in the right direction. The state-issued startup licenses and new flexible visa rules also had a positive effect on driving investment into the country.

The abundance of investment and funding opportunities available for entrepreneurs is another factor that contributes to the UAE's success as a startup hub. Following the success of EXPO2020 in Dubai, with events such as The Annual Investment Meeting, the Global Entrepreneurship Congress, and the Startup Investment Forum, the UAE has established a presence on the global stage and attracted more attention to its vibrant startup ecosystems.

The UAE also made a brave step in signing a peace treaty with Israel, allowing the two most advanced startup economies in the region to cooperate and grow together.

Major challenges facing the UAE include a high cost of living and antiquated business regulations, however, with help from public sector initiatives, the government could develop a supportive legal and financial framework for entrepreneurs throughout the region. After its remarkable startup success, the next step for the UAE should be to increase its reach beyond MENA and become a regional and global startup hub.



# Notable Startups and Ecosystem Champions

# ⇒ Kitopi Unicorn

### Dubai, United Arab Emirates

Kitopi is a cloud kitchen startup that provides delivery services for restaurants.

# 

## Dubai, United Arab Emirates

Vista Global Holding provides worldwide business flight services.

## Tabby

## Dubai, United Arab Emirates

Tabby is a Buy Now, Pay Later platform allowing consumers to shop and pay in 4 installments at no cost.

## **Our Report Partner**







# Portugal remains in the top 30 despite mild negative momentum.



Portugal has experienced a mild loss in momentum, losing one spot to rank 28th in the world. Despite this, the country remains in the global top 30 with a significantly better Business score than many of its contenders, including the UAE, Brazil, and Taiwan. In fact, on Business score, Portugal ranks 21st in the world. In the EU, Portugal ranks 13th overall, next in line after Austria.

Lisbon is still in the global top 100 at 83rd, after a small decrease of one spot. Nationally, however, the ecosystem

is visibly dominant, being the only city in Portugal in the top 100. Excelling in Marketing & Sales, Lisbon is getting closer to being ranked in the top 30 in this particular industry. Lisbon ranks 18th in the EU, very close in score to Prague, ranked 17th in the EU, and with a safe margin from its closest EU contender, Warsaw.

Portugal's second tier is represented by Porto, which decreased 16 spots to rank 136th, widening the gap with Lisbon. Porto's best industry for startups is Ecommerce & Retail, where it ranks 73rd. At 3rd nationally, Braga has fallen 136 spots and to 432rd globally.

National Rank and Change	City	Global Rank and Change	Total Score	Overperforming Industry
1 -	Lisbon	83 <sup>-1</sup>	8.300	Marketing & Sales
2 -	Porto	136 <sup>-16</sup>	5.384	Ecommerce & Retail
3 -	Braga	432 <sup>-136</sup>	1.017	
4 -	Coimbra	441 <sup>+56</sup>	0.958	
<b>5</b> <sup>-</sup>	Aveiro	667 <sup>-84</sup>	0.421	
6 -	Funchal	949 <sup>-242</sup>	0.179	
<b>7</b> new	Leiria	965 <sup>new</sup>	0.173	



Positive momentum was recorded in Coimbra, which increased 56 spots to rank 441st, and in Leiria, which entered the top 1000 at 965th. WIth Leira joining the top 1000, Portugal now has 7 ranked ecosystems, versus 6 in 2021.

# **Startup Ecosystem Overview**

The business environment in Portugal has greatly improved over the years as the country has begun to create a favorable climate for entrepreneurship, foreign investment, and digital nomads. The nation is home to high-tech companies focused on the exchange and sharing of knowledge, as well as to local innovators aiming to create jobs and growth in the country. Notable Portuguese exits include FarFetch, a luxury shopping platform, and Portuguese unicorns include OutSystems, TalkDesk, and Feedzai.

One of the most impressive resources of the Portuguese ecosystems is the availability of high quality engineering talent and English speakers. Lisbon is still a popular destination for digital nomads, expats, and lifestyle business owners, thanks to the relatively low cost of living, good weather, and solid infrastructure of the country. There are also a growing number of startup support facilities, such as Startup Lisboa, an incubator for early stage startups. Moreover, due to favorable tax policies, there is a movement of Portuguese entrepreneurs interested in decentralized finance and cryptocurrencies.

Additionally, Portugal offers options to non-European residents launching startups, such as the golden visa or startup visa, the tech visa, and the non-habitual residence (NHR) tax regime,

offering significant tax cuts for foreign income, freelancing, and crypto currency, among others. With government initiatives aimed at promoting and developing the startup ecosystem, and with easy access to the European market and the Schengen Zone, Portugal has the potential to become one of the strongest startup economies in Europe. The country's economic ties to Brazil, with whom Portugal shares a common language, also provides Portuguese startups access to the huge Brazilian market.

Portugal's commitment to its startup ecosystem is evidenced by the annual Web Summit event in Lisbon, which creates massive branding benefits for Portugal and its startup economy.

That said, Portugal's startup scene is still not fulfilling its full potential, although the public sector has put substantial resources toward making this happen. The country has yet to produce a high quantity of unicorns, lags behind other leading European ecosystems in total investment, and requires a legislative overhaul to remove red tape. The public sector is aware of the strategic importance of entrepreneurship, and we see few other countries allocating so many resources toward improving local startup ecosystems. One pressing issue has to do with national mindset and culture, which is relatively risk averse. The Portuguese startup scene has a renaissance during every economic crisis when people are compelled into entrepreneurship. The new strategy should be to make entrepreneurship more attractive in times of economic prosperity.



# Notable Startups and Ecosystem Champions

OutSystems Unicorn (\*)

Lisbon, Portugal

Outsystems is an app development platform.

**⇒ TalkDesk** Unicorn **(\*** 

Lisbon, Portugal

Talkdesk is a contact center and AI software provider.

→ Feedzai Unicorn

Porto, Portugal

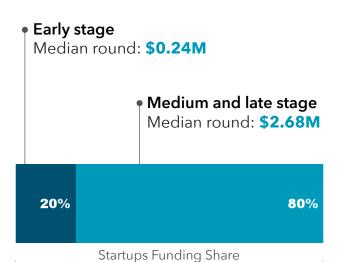
Feedzai is the market leader in fighting fraud with Al.

## **Pantheons**

## Web Summit

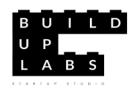
Lisbon, Portugal

The Web Summit brings together leading speakers, major tech companies, and top media outlets.



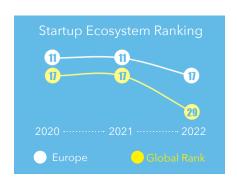
## **Our Ecosystem Partners**







# Russia falls from the top 20.



Russia decreased by 12 spots this year, a loss in momentum that is of no surprise following recent events. As a showcase of its resilience, the country remained in the global top 30 at 29th but has undoubtedly become more isolated. In Europe, Russia fell 6 spots to rank 17th as all of its startup ecosystems decreased this year.

Moscow is ranked 29th after decreasing 20 spots, and is the only Russian ecosystem in the global top 200, showing how centralized the Russian startup scene is. In

spite of its decline, Moscow is still ranked highest in Eastern Europe, far ahead of its first contender Tallinn at 62nd. Other Russian cities have suffered an even more substantial loss: Saint Petersburg fell by 38 spots to rank 237th and Kazan fell by 127 spots to rank 555th globally (but increasing one spot nationally). In spite of its overall decline, Saint Petersburg improved its position in Eastern Europe from 19th in 2021 to 18th, benefiting from an even greater decline of Bratislava, which ranked 18th last year.

National Rank and Change	City	Global Rank and Change	Total Score	Overperforming Industry	
1 -	Moscow	29 <sup>-20</sup>	25.082	Edtech	1
2 -	Saint Petersburg	237 <sup>-38</sup>	3.272		
<b>3</b> <sup>+1</sup>	Kazan	555 <sup>-127</sup>	0.582		
<b>4</b> <sup>-1</sup>	Novosibirsk	589 <sup>-189</sup>	0.522		
5 -	Kaliningrad	772 <sup>-162</sup>	0.298		
6 -	Chelyabinsk	839 <sup>-202</sup>	0.243		
7 -	Tomsk	854 <sup>-177</sup>	0.230		
 <b>8</b> <sup>+3</sup>	Ulyanovsk	861 <sup>-52</sup>	0.226		



Last year, Russia boasted 16 cities in the top 1000. This year, it has only 9, as multiple ranked Russian cities have dropped out of the global top 1000.

# **Startup Ecosystem Overview**

Russia has been trying to overcome the perception of a closed startup ecosystem and open itself to the international markets for a long time. Unfortunately, the war in Ukraine has further deepened divides with the West. Amid a complicated geopolitical situation, Russia's startup ecosystems face the possibility of becoming even more isolated. In addition, recent events increase the risk of severe brain drain of Russia's most talented entrepreneurs and IT professionals. Building a Russian startup targeting international sales is becoming increasingly difficult with its disconnection from the global financial system due to sanctions on the country and its banking system.

However, we should also note a few advantages of the Russian startup ecosystem. Firstly, Russia has a big enough market to allow its startup founders to create substantial revenue by building high quality technology exclusively for Russian buyers. The advantages can already be seen, as the latest international isolation reduces competition from global solutions that are no longer available, giving Russian startups vast opportunities of taking domestic market share on all aspects of the economy from their International counterparts. It should also be noted that the Russian economy so far has been surprisingly resilient. Russia's currency is holding up, and its trade deficit is now

shrinking as its imports are reducing, and energy exports maintained statiblity. This, however, can only push the local startup ecosystem to reach a certain distance, as the local economy is not on the scale of other closed ecosystems like China. The amount of technical talent in Russia is second to none, but the challenge has always been making sure that this talent stays in Russia. Some of the founders of Telegram, Google, Revolut, and Ethereum were born in Russia, showing the lost potential when more ambitious Russian entrepreneurs move to other startup ecosystems. Some massively successful Russian startups and unicorns have transitioned their official headquarters to other countries while keeping most of their operations and development in Russia. It has not been easy to be recognized as a Russian global startup.

Despite the current situation, we should also note that the public sector in Russia has been successful in building highly involved corporate accelerators, led by the Skolkovo center, an outstanding large scale tech center.

We can only hope the situation goes back to normal soon, as we are not convinced that an isolated, closed garden Russian ecosystem is a good outcome for the global startup ecosystem. Russia is a textbook case of massive but unrealized potential due to events beyond the control of its talented entrepreneurs.



# Notable Startups and Ecosystem Champions

#### UserX

#### Moscow, Russia

An application that records the actions of users in video format.

#### **⇒** ivi

#### Moscow, Russia

ivi is a video-on-demand platform that brings traditional television experience online with a free video player.

#### Uchi.ru

#### Moscow, Russia

Uchi.ru offers online courses for students.

#### **Pantheons**

#### Badoo

#### Moscow, Russia

Badoo is a dating-focused social network, allowing users to chat, make friends, and share interests.

#### Kaspersky

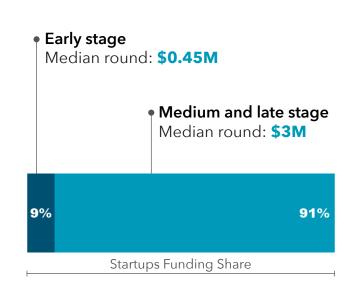
#### Moscow, Russia

Kaspersky is a global cybersecurity company.

#### Yandex

#### Moscow, Russia

Yandex is a multinational technology company that provides internet-related services and operates a search engine platform.





# New Zealand enters the top 30 globally.



New Zealand continues its growth for the third year in a row in the global Index. It is now ranked 30th globally, up 3 spots, having realized a strong improvement in its scores relative to other countries of similar rank last year. Continuing the same positive trend next year will require substantial effort, however, as the score gap between Russia and Portugal at 29th and 28th is significant.

New Zealand ranks 8th in the Asia-Pacific region and excels in Business environment, ranking 7th worldwide for Business score.

The country has made significant progress from having 4 ranked cities last year to having 8 cities in the global top 1000 this year, doubling its representation in the Index.

Auckland remains the highest ranking city among New Zealand's ecosystems, in spite of a decrease in ranking of 7 spots to 112th. Auckland is ranked in the top 100 globally for Edtech and Foodtech, and excels in the Transportation industry, ranked 28th globally. To continue New Zealand's march up the Index, it is important to strengthen Auckland's position so that it can enter the global top 100.

National Rank and Change	City	Global Rank and Change	Total Score	Overperforming Industry	
1 -	Auckland	112 <sup>-7</sup>	6.443	Transportation 🙎	
<b>2</b> <sup>+1</sup>	Christchurch	228 <sup>+168</sup>	3.478		
<b>3</b> <sup>-1</sup>	Wellington	268 <sup>+15</sup>	2.572		
<b>4</b> new	Dunedin	578 <sup>new</sup>	0.536		
<b>5</b> new	Tauranga	607 <sup>new</sup>	0.491		
<b>6</b> new	Hamilton	818 <sup>new</sup>	0.255		
<b>7</b> new	Palmerston North	823 <sup>new</sup>	0.251		
 <b>8</b> new	Nelson	873 <sup>new</sup>	0.214		



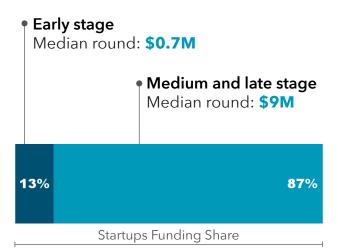
One of the biggest winners is Christchurch, which has had a very substantial leap of 168 spots to 228th globally, surpassing Wellington as the second highest ranked city nationally. Wellington also advanced 15 places to 268th globally.

This was a stellar year for New Zealand cities in lower tiers, showing the diversity and potential of New Zealand's ecosystems. 5 new cities have entered the global rankings: Dunedin (578th), Tauranga (607th), Hamilton (818th), Palmerston North (823rd), and Nelson (873rd). Unfortunately, the beautiful city of Queenstown, which joined the top 1000 last year, has dropped from the Index.

# **Startup Ecosystem Overview**

New Zealand is claiming the role of regional player in the Oceania startup scene. The country has come a long way from relying on an agricultural economy to focusing on technology and innovation. With the public sector's involvement, investments in startups multiplied, and the country now relies on startups to maintain economic growth. Considering the country's small population, the results are encouraging. The New Zealand startup ecosystems have an interesting relationship with their Australian counterparts; Australia is not only a close ally, but also a large potential foreign market. The two countries share the same language, and there is free movement across borders. On the other hand, as Australia offers so many incentives for talent to relocate, it is also a source of brain drain from New Zealand ecosystems. Besides the larger market for expansion provided by Australia, New Zealand entrepreneurs view the US, UK, and Singapore as possible countries to scale their startups in spite of the time zone challenges.

New Zealand's public sector has implemented several forward thinking initiatives, such as a matching fund for companies investing in early-stage Development Tax Incentives help startups attract a highly qualified workforce, while the Entrepreneur Work Visa ensures a steady flow of foreign startup founders. These development plans are well intentioned, but an overall increase in impactful startups is needed to take New Zealand's ecosystem to the next level.



# Notable Startups and Ecosystem Champions

#### Leaft Foods

#### Canterbury, New Zealand

Leaft Foods is creating a new food system by capturing the most abundant protein on the planet - rubisco from green leaves.

#### **□** LawVu

#### Tauranga, New Zealand

LawVu is creating better business outcomes with the Legal Workspace for in-house legal teams.

#### NewFish

#### Auckland, New Zealand

NewFish is an early stage food and biotechnology company focused on microalgae fermentation.

#### **Our Report Partner**





# In spite of having 34 ranked ecosystems, Italy drops out of the top 30.



Italy decreased in ranking by 2 spots, now ranking 31st in the world, with a score that is only slightly higher than Czechia's score, ranked 32nd. Italy's drop in the ranking continues its negative momentum from last year, when it dropped 4 spots. In Europe, the country dropped one spot to rank 18th, while in the EU it is ranked 14th.

With 34 ranked ecosystems, Italy is the country with the 8th highest number of ranked ecosystems, ahead of France and Brazil. It, therefore, comes as no surprise that Italy outranks many of its competitors when it comes to the Quantity score, where it is ranked 19th in the world.

ı	National Rank and Change	City	Global Rank and Change	Total Score	Overperforming Industry	
	1 -	Milan	65 <sup>-9</sup>	9.943	Foodtech	
	2 -	Rome	143 <sup>-3</sup>	5.237	Energy & Environment	
	3 -	Turin	273 <sup>-42</sup>	2.479		
	4 -	Florence	321 <sup>-63</sup>	1.748		
	5 -	Bologna	334 <sup>-42</sup>	1.633		
	6 -	Venice	478 <sup>-91</sup>	0.793		
	<b>7</b> +4	Genoa	508 <sup>+3</sup>	0.709		
	<b>8</b> <sup>+2</sup>	Cagliari	519 <sup>-20</sup>	0.673		
	<b>9</b> <sup>-1</sup>	Naples	525 <sup>-79</sup>	0.656		
	<b>10</b> <sup>-3</sup>	Catania	535 <sup>-132</sup>	0.631		



If Italy could improve its Quality score by producing more unicorns, exits, or other higher impact startups, we may see it return to the top 30 in the following year.

At the industry level, the country ranks best in Energy & Environment (with Rome ranked 15th in the world) and in Fintech (where Milan is ranked 61st in the world).

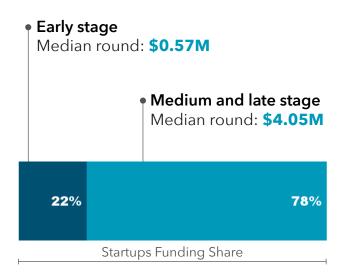
Italy now has only 6 cities in the top 500 compared to 10 cities in 2021, showing the relative decrease of top Italian startup ecosystems. However, the number of Italian cities in the top 1000 remained unchanged, at 34. Milan, the top startup ecosystem, has lost 9 spots in the Index to position 65. Its position is not likely to be equaled by Rome (ranked 143rd) or Turin (ranked 273rd) anytime soon. As such, Italy remains with two cities in the top 200.

Rome, the second highest ranked city in Italy, dropped by 3 spots this year. 22 of Italy's 34 ranked startup ecosystems decreased in rankings in 2022, however, the city of Padua had the best performance in Italy, reaching position 580 after a 182 spot jump.

To reverse the trend, Italy will need to improve the entrepreneurial activity in more of its seed startup ecosystems while continuing to improve the quality of its top national startup ecosystems.

# Startup Ecosystem Overview

Italy has a strong tradition of entrepreneurship: from high-quality leather goods to aerospace, from apparel to med-tech, from agro-food to industrial automation. This entrepreneurial mindset also has the potential to affect the startup scene, spurring increased activity and attracting startup stakeholders. For instance, Rome has over 20 incubators and accelerators and a few venture capital firms. While many startups exist in cities such as Turin, Bologna, Naples, and Rome, Milan is typically seen as a bigger ecosystem due to its commercial mentality and a significant number of VC funds.



The economy is largely export-driven, with Italy being a top 10 global merchandise exporter, according to the latest <u>WTO rank</u>. However, the local startup ecosystem has still not managed to substantially contribute to the economy.

The main challenges that the Italian startup ecosystems face are: building a more favorable regulatory environment to stimulate startups and tax policies, encouraging greater involvement of the private sector (SMEs in particular), establishing a stronger global outlook, and simplifying the bureaucratic process, which is currently among the heaviest burdens that startups have to face.



The Italian public sector ecosystem developers are much less active than in other European nations, but recent initiatives are changing that. In 2020, the Italian government sponsored an investment program aimed at the native startup ecosystem, creating a new venture arm: CDP Venture Capital.

Additionally, the Ministry of Economic Development launched an initiative called The Italian Startup Act, which reorients existing legislation to incentivize Italian startup formation with tools like tax breaks on early-stage investments and R&D credits, as well as a startup visa to attract foreign talent.

Italy will need to implement reforms faster to stop founders from moving their headquarters elsewhere.

On the other hand, it is encouraging to see that startup founders have a large and increasingly talented labor pool. Italy boasts an extensive network of high-quality universities (300,000 graduates per year), as well as science and technology parks. In addition, great news is coming from the Italian startup

ecosystem in 2022: fintech startup Scalapay reached unicorn status after its last funding round, with a valuation of more than \$1 billion. With Italy joining the unicorn club, we expect further acceleration of its ecosystem growth in the years to come.

# **Notable Startups and Ecosystem Champions**

⇒ Scalapay Unicorn



Milan, Italy

Scalapay is a payment solution provider that allows customers to buy and pay in three installments without any additional interest.

#### Everli

#### Milan, Italy

Everli is a marketplace for online grocery shopping where customers can choose groceries from a variety of retailers.

# Milkman Technologies

#### Verona, Italy

Milkman is a last-mile delivery platform company, offering technology and expertise for designing optimal delivery experiences.

#### **Our Report Partners**











# Czechia keeps its place in the Top 35.



Czechia remained stable in the ranking this year, ending a negative momentum of dropping in the Index for the last two years. The country maintained its global rank at 32nd position. Czechia ranks 19th in Europe, 16th in the EU, and 4th in Eastern Europe.

All Czech cities have dropped in the Index besides Prague which preserved its place in the top 100 and advanced one spot to 82nd in 2022. Prague is ranked high in the region. It is 5th in Eastern Europe, showing the potential to

become an important European player. Prague is also ranked in the top 50 most innovative startup ecosystems for a number of industries and primarily in Healthtech where it ranks 45th.

After Prague as the nationally highest-ranked city, Czechia has 3 more cities in the top 1000 with negative momentum. Brno ranks 288th globally after losing 53 spots, Ostrava has fallen 109 spots to 574th, and Plzen decreased 145 spots to 989th. The results indicate significant dispersion of Czechia's startup ecosystems in the development level, looking at the difference between their rankings. Czechia has 4 cities in the top 1000, similar to 2021. In order to maintain and improve its global ranking, it is important to continue strengthening Prague, but at the same time grow other ecosystems, aiming to increase the country's ranked city count, and aiming to have another city in the top 200.

п	National Rank and Change	City	Global Rank and Change	Total Score	Overperforming Industry	
	1 -	Prague	82 <sup>+1</sup>	8.346	Healthtech 👲	
	2 -	Brno	288 <sup>-53</sup>	2.263		
	3 -	Ostrava	574 <sup>-109</sup>	0.545		
	4 -	Plzen	989 <sup>-145</sup>	0.162		



# Startup Ecosystem Overview

The relatively low cost of living in Czechia, along with low tax rates and a central location in Europe, are major contributors to its potential growth and status as an attractive location for foreign entrepreneurs. The high-tech industries and the gaming sector are already relatively developed in the country, and now is the time to improve more industries and build higher quality startups. Proving that the country has the capacity to create these higher quality startups and scale globally, Czechia welcomed Rohlík in 2021 as its first unicorn.

The Czech government, along with organizations like **Czechlnvest**, are focused on developing the national startup ecosystem in a number of ways. Most notably, the government offers a **Startup Visa** for entrepreneurs establishing new enterprises in Czechia. With plentiful investment from both domestic and international sources, Czechia is fertile ground for entrepreneurs targeting the European market. The country's prosperous economy boasts high GDP growth rates and one of the lowest unemployment levels in the EU. Moreover, the skilled workforce and lower employment costs make the country attractive to investors. Deeper investment in the local startup ecosystem will help Czechia diversify away from manufacturing (around 80% of GDP depends on exports) and strengthen its technology-based service and knowledge economy. It is encouraging to see that the government is prioritizing this aspect in 2022 by incentivizing investment in tech startups through new legislation.

# Notable Startups and **Ecosystem Champions**



#### Prague, Czechia

Rohlik is a grocery delivery company that provides same-day delivery services.

#### Sotio

#### Prague, Czechia

Sotio is a biotechnology company developing a new immunotherapy based on activated dendritic cells for the treatment of cancer.

#### Apify

#### Prague, Czechia

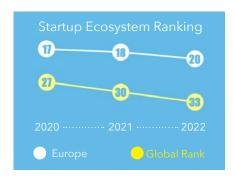
Apify is a web scraping and automation platform that can turn any website into an API.

#### **Our Ecosystem Partner**





# Warsaw loses its position in the top 100.



Poland is ranked 33rd, registering a decrease of 3 spots from the previous year. Whereas last year Poland's score was in the same weight category as the scores of Italy, Norway, and Czechia, this year all these countries opened a gap from Poland, such that further slippage in the ranking is a real risk.

All but one ranked city in Poland dropped in their rankings in 2022. Consequently, Poland now has three cities ranked in the world's top 300 ecosystems, versus five such cities in 2021. However, this is in no way an indicator of low activity

in the startup scene in Poland. In fact, the country continues to be a strong player in Eastern Europe where it is ranked 5th, with a significantly higher score than its contender, Bulgaria, ranked 6th in Eastern Europe. In the EU, the country has positioned itself in the 13th rank.

ı	National Rank and Change	City	Global Rank and Change	Total Score	Overperforming Industry
	1 -	Warsaw	106 <sup>-28</sup>	6.832	Marketing & Sales
	2 -	Krakow	186 <sup>-36</sup>	4.461	Marketing & Sales
	3 -	Wrocław	187 <sup>-19</sup>	4.452	Hardware & IoT
	4 -	Poznan	301 <sup>-81</sup>	2.031	
	5 -	Gdańsk	392 <sup>-114</sup>	1.257	
	6 -	Gdynia	433 <sup>-78</sup>	1.004	
	7 -	Katowice	480 <sup>-124</sup>	0.786	
	<b>8</b> new	Gliwice	615 <sup>new</sup>	0.481	
	<b>9</b> <sup>-1</sup>	Szczecin	628 <sup>-66</sup>	0.471	
	<b>10</b> <sup>-1</sup>	Lublin	656 <sup>-92</sup>	0.433	



Poland scores relatively better on the Quantity Score than on the Quality score. This shows that Poland continues to develop more startups, and the focus should be on helping them make more impact. Poland maintained 14 cities in the global top 1000 in 2022: Gliwice joined the list at position 615, while Bielsko-Biala dropped below the 1000 threshold.

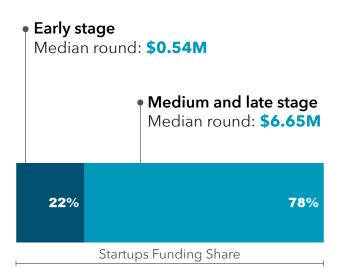
The highest ranked Polish city remains Warsaw which is now 106th after decreasing 28 spots. Krakow (ranked 186th) and Wrocław (ranked 187th) are almost at a tie as suggested by their total scores. Wrocław's best performing industry is Hardware & IoT where the ecosystem ranks in the top 200. The only Polish city to jump in the Index this year has been Białystok, with an impressive 124 spot increase to position 766th. In addition, we would like to welcome to the Index Gliwice which is ranked 615th.

# **Startup Ecosystem Overview**

With a strong economy, talented developers, and a government committed to actively supporting the growth of its startup ecosystem, Poland has yet to achieve its true potential.

Over the years, the Polish public sector has taken an overly active approach focused on direct investments and government-backed funding, which has backfired on the ecosystem and its organic growth. This is a good case study of a central planner approach, common to many countries in Europe and Asia, which seems good in theory but does not yield positive results. Massive statesponsored investment has created a glut of artificially inflated valuations, producing

startups that require the life-support of government funds. This multiplies both bureaucracy and red tape. Talented entrepreneurs and promising startups not interested in public sector investment will probably try their luck elsewhere. Likewise, private investors will now need to compete with the public sector directly, which pushes those who are genuinely interested in investing in startups out of the local ecosystem. Regardless, Poland is on track to becoming a strong economic European startup hub sooner or later, there is simply too much economic potential and too many talented entrepreneurs for it not to happen.



Global corporations have taken notice of Poland's potential and are investing resources to support local ecosystem growth (e.g. Google Campus in Warsaw, HubRaum in Krakow). We have already seen that the country can produce major success stories, such as DocPlanner, and we hope this will replicate and attract more funding and attention to the country's startup scene.



Polish startups are prone to having a global focus and many plan to expand overseas.

While it helps for the country to be a member of the European Union, this also means that many talented entrepreneurs choose to relocate their startups to other EU member states. The US is another popular relocation destination. Conversely, the Polish government is working to attract foreign entrepreneurs, and has launched a <u>Startup Visa</u> to help with startup relocation.

When it comes to the workforce for startups, Polish labor policies are making it difficult for founders to find affordable talent.

Implementing employee stock ownership plans could motivate talent to choose to work in a startup over a corporation, but ultimately the public sector will need to get involved to fix regulatory gaps.

The recent acceptance of Ukrainian war refugees into Poland is both courageous and admirable, but it also creates a massive opportunity for Poland to reap the rewards from talented Ukrainian entrepreneurs and IT professionals who can further develop the country's startup economy.

All in all, Poland's economic growth and talented entrepreneurs indicate that the country has a strong foundation for powerful startup ecosystems.

# Notable Startups and Ecosystem Champions

#### DocPlanner

Warsaw, Poland

DocPlanner is a booking platform and management software provider for doctors.

#### Packhelp

Warsaw, Poland

Packhelp simplifies creating, ordering, and managing custom and sustainable packaging.

#### **⇒** Neptune.ai

Warsaw, Poland

Neptune.ai is a lightweight experiment management tool that fits multiple workflows.

#### **Our Ecosystem Partner**



#### **Our Report Partners**







# Chile remains the 2nd highest ranked ecosystem in Latin America.



Chile increased 2 spots this year, advancing to 34th globally and regaining its position from 2020. Chile remains the 2nd highest ranked country in Latin America, ahead of Mexico and Argentina. It is the highest ranked Latin American country by Business score, positioning Chile as the country with the most entrepreneur-friendly business environment in Latin America.

The city of Santiago advanced 3 spots to 67th globally, and ranks notably for Foodtech at 19th worldwide. Regionally, Santiago is the 4th highest ranked city in

Latin America. Nationally, the gap between Santiago and other ranked Chilean cities is exceptionally large, meaning that Chile's ecosystem is highly centralized and overly dependent on Santiago.

Other ranked Chilean cities have fallen dramatically in the Index, with Viña del Mar registering the most significant fall of 273 spots to 960th globally. Additionally, Valparaiso has fallen 208 spots to 951st, while Concepcion has fallen out of the top 1000 cities. This leaves Chile with only 3 cities in the global top 1000, two of which are ranked below 900, which is the most volatile part of the ranking, presenting a risk that these cities will drop out of the Index next year.

Compared to 2020, when Chile had five cities in the top 1000, now it has only three, two of which are on the verge of falling out of the Index. It is evident that Chilean startup ecosystems are seriously lagging behind in development, and the country's global position is excessively dependent on Santiago. In a global environment where other ecosystems invest heavily in their growth, this may not be a sustainable situation for Chile.

п	National Rank and Change	City	Global Rank and Change	Total Score	Overperforming Industry	
	1 -	Santiago	67 +3	9.708	Foodtech	
	<b>2</b> <sup>+1</sup>	Valparaiso	951 <sup>-208</sup>	0.178		
	<b>3</b> <sup>-1</sup>	Viña del Mar	960 <sup>-273</sup>	0.175		



# **Startup Ecosystem Overview**

One of the main factors contributing to the health of Chile's startup ecosystem is a progressive economy relative to other countries in Latin America.

One clearly effective program from a marketing standpoint, Startup Chile has garnered global acknowledgment for the country. The program is not restricted to Chilean entrepreneurs and gives founders around the world generous support through an accelerator in Santiago, along with a 1 year startup visa. This was an innovative way to attract foreign entrepreneurs, and other countries are now trying to replicate it. For this reason we have marked Startup Chile as a member of the pantheon club on the StartupBlink map. Chile is a country whose ecosystem developers, like their Estonian counterparts, have actively built a narrative which we hope will become a reality, and we respect this daring approach toward innovative policy-making. We wish more ecosystem developers in the world would do the same.

However effective, these marketing and government programs have not yet translated into the creation of unicorns. One reason for this is that Chilean startups tend to focus on local rather than international markets, and the local market of 19 million is relatively small. The collaborative and innovative startup playground of Santiago de Chile, coupled with forward thinking and advanced startup promotion initiatives from the Chilean government, will serve Chile's startup ecosystem well over the coming years.

# Notable Startups and Ecosystem Champions

⇒ NotCo Unicorn (\*)

#### Santiago, Chile

NotCo is a food technology company that produces plant-based meat and dairy substitutes.

**⇒** Betterfly Unicorn €

#### Santiago, Chile

Betterfly is a purpose-driven collective wellbeing platform that converts healthy activities into charitable donations.

#### Migrante

#### Santiago, Chile

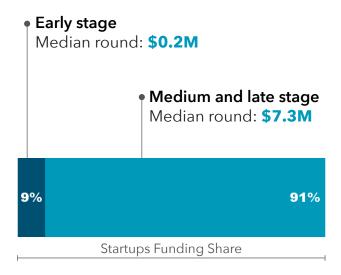
Migrante provides consumer secured loans and financial advice to underbanked people in LATAM.

#### **Pantheons**

## Startup Chile

#### Santiago, Chile

Startup Chile is a globally recognized seed accelerator created by the Chilean Government.





# Mexico enters the top 35 global startup ecosystems.

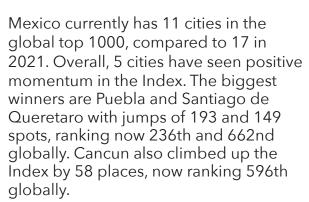


Mexico continues its impressive growth trajectory for the third year in a row, jumping 3 spots to 35th. Mexico is now the 3rd highest ranked country in Latin America.

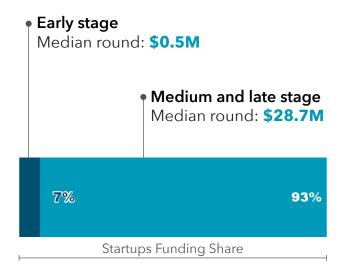
Mexico City climbed 6 spots to rank 44th globally, strengthening its position in the global top 50. It ranks 2nd regionally for Latin America, behind São Paulo. Mexico City performs well in a number of industries, and overperforms in Ecommerce & Retail and Fintech, ranking in the top 50 for those industries.

Several other Mexican ecosystems also had positive momentum this year. Ranked 2nd nationally, the city of Monterrey is showing good results, advancing 10 spots to 139th globally, but there is still a big gap between Mexico City and other cities. Guadalajara had a fall of 46 spots to 202nd globally, remaining the 3rd highest ranked ecosystem nationally, but losing its position in the global top 200.

п	National Rank and Change	City	Global Rank and Change	Total Score	Overperforming Industry
	1 -	Mexico City	44 +6	15.691	Ecommerce & Retail
	2 -	Monterrey	139 <sup>+10</sup>	5.325	
	3 -	Guadalajara	202 <sup>-46</sup>	4.098	
	4 -	Puebla	236 <sup>+193</sup>	3.312	
	5 -	Zapopan	552 <sup>-89</sup>	0.590	
	<b>6</b> +2	Cancun	596 <sup>+58</sup>	0.508	
	<b>7</b> <sup>-1</sup>	Chihuahua	618 <sup>-86</sup>	0.477	
	<b>8</b> <sup>+2</sup>	Santiago de Queretaro	662 <sup>+149</sup>	0.424	



Mexico has in total 3 cities in the top 300 globally, with the others ranked 500th or lower. The distribution of Mexico cities in the top 1000 reveals the variety and activity of the startup ecosystem.



# **Startup Ecosystem Overview**

The Mexican startup ecosystem has much entrepreneurial potential, as Mexico is one of the largest Latin American markets with access to both the North American and South American markets. The country provides startups with various means of investment funding, as well as an environment with low operating costs. International investors like Goldman Sachs, Tencent, and Softbank are all actively looking to invest in budding Mexican startups. Starting in 2020, the country has begun producing unicorn

after unicorn. Mexico can now showcase plenty of success stories, such as Kavak, Clip, and Bitso. This proves that investors are taking note of the potential of Mexico's startup ecosystems.

The main challenge faced by Mexican entrepreneurs is finding specialized talent in specific industries, meaning that many startups need to outsource for applicable skills. Thankfully, there are several ecosystem enablers who help promote the startup scene and retain entrepreneurial talent. For instance, <a href="Startup México">Startup México</a> is a notable initiative not only for Mexico, but for the entire Latin American region. With innovative startup cities like Mexico City, Guadalajara, and Monterrey, Mexico enjoys a dominant position among Latin American startup ecosystems.

# Notable Startups and Ecosystem Champions

Mexico City, Mexico

Kavak is a platform that allows customers to purchase and sell used cars.

⇒ Bitso Unicorn (€)

Puebla, Mexico

Bitso is a cryptocurrency exchange platform that allows users to buy and sell bitcoin and other cryptocurrencies.

⇒ Clip Unicorn (\*)

Mexico City, Mexico

Clip is a terminal that allows businesses to easily accept all electronic payments. methods.

Our Ecosystem Partner





# Bulgaria's startup ecosystems have lost momentum.



Bulgaria decreased one spot to rank 36th globally but remains the highest ranking country in the Balkans. That said, It's important to note that Bulgaria's national rank is positively influenced more by its Quantity score, where it ranks 27th worldwide, than by its Quality score.

All ranked Bulgarian cities have decreased in their rankings this year. The Bulgarian capital Sofia, ranked 1st in Bulgaria, had a mild decrease of 2 spots to rank 123rd globally, maintaining its position as 2nd highest ranked

city in the Balkans. Sofia ranks in the top 100 for five industries, and highest in Marketing & Sales at 81st globally.

п	National Rank and Change	City	Global Rank and Change	Total Score	Overperforming Industry	
	1 -	Sofia	123 <sup>-2</sup>	5.654	Marketing & Sale	
	2 -	Varna	644 -224	0.446		

For more information about the rankings of cities, view the country dashboard on Startublink.com.

Bulgaria's 2nd ranked city, Varna, fell 224 spots to 644th globally, strongly establishing top-ranked Sofia as the dominant Bulgarian hub of entrepreneurial innovation, and showing the centralization of the Bulgarian ecosystem.

Bulgaria has only 2 cities in the top 1000 startup ecosystems this year, versus 3 cities in 2021, after Plovdiv dropped from the Index. Compared to 2020 when it had 4 ranked cities, we see a clear negative trend in the development of Bulgarian startup ecosystems.



## **Startup Ecosystem Overview**

Bulgaria has a relatively small market, but checks several key boxes for startups: strong digital infrastructure, low cost of living, and top tech talent. Bulgaria has also created a strong startup support environment with a number of successful accelerators and incubators, as well as several VC & EU funding opportunities for local early-stage founders. Showcasing the ecosystem's success and funding potential, Payhawk is Bulgaria's first unicorn.

Entrepreneurs and digital nomads from across Europe are noticing the Bulgarian startup scene and moving ventures into the country, lured by the low cost of living and special tax benefits offered by the public sector. Bulgaria has an abundance of technically skilled talent specializing in advanced tech industries like machine learning and data analysis, which suggests that the ecosystem has the potential to become a regional technological hub if the right policies are implemented. Promising steps are being taken, with the government establishing new agencies to promote entrepreneurship and with initiatives such as a startup visa. Moreover, Bulgaria boasts the lowest personal and corporate tax rates in the European Union, which helps attract foreign investors. More policies like these will be needed to facilitate a legal framework for entrepreneurs, encourage private investment, and reduce dependence on public funding. Bulgaria could benefit a lot from promoting an entrepreneurial mindset and shifting focus from outsourcing to creating new international startups.

# **Notable Startups and Ecosystem Champions**

⇒ Payhawk Unicorn



Sofia, Bulgaria

Payhawk is a financial system that combines credit cards, payments, and expenses into one interface.

#### Ucha.se

#### Sofia, Bulgaria

Ucha.se is an online platform that offers educational videos and exercises on various subjects.

#### 365 Data Science

#### Sofia, Bulgaria

365 Data Science is an educational career website for aspiring business intelligence analysts, data analysts, and data scientists.

#### **Our Ecosystem Partner**



#### **Our Report Partner**





# With solid performance, Argentina remains the 4th highest ranked country in Latin America.



Argentina registered a gain of two spots to rank 37th globally in 2022, and remains the 4th highest ranking country in Latin America. Three of its four ranked cities climbed up the Index this year.

It was a good year for the city of Buenos Aires as it draws closer to the global top 50; The city saw an increase of 4 spots to 56th globally. This is a highly volatile part of the Index, with only very minimal differences in scores between positions 56-58. Buenos Aires continues to develop as a regional hub by solidifying its position as the 3rd highest

ranked startup ecosystem in Latin America, with a good margin from its first regional contender Santiago. Most notably, Buenos Aires ranks high, at 49th, in the Edtech industry.

Cordoba, the 2nd highest ranked Argentinian city, entered the global top 250 by making a significant jump of 49 spots to 248th globally. Cordoba appears to be the country's only candidate to enter the global top 200 in the future. At 3rd nationally, Mendoza fell 161 spots to 677th, while Rosario made a substantial jump of 179 spots to rank 693rd globally. Together, these are the four Argentinian cities in the Index, compared to last year's five. While the country ranking strongly relies on Buenos Aires, Cordoba's climb should be leveraged, as further investments can allow Cordoba to become a second high impact ecosystem in Argentina.

п	National Rank and Change	City	Global Rank and Change	Total Score	Overperforming Industry	1
	1 -	Buenos Aires	56 <sup>+4</sup>	10.938	Edtech	
	2 -	Cordoba	248 +49	2.998		
	3 -	Mendoza	677 <sup>-161</sup>	0.410		
	4 -	Rosario	693 <sup>+179</sup>	0.395		



# **Startup Ecosystem Overview**

Argentinian entrepreneurs have demonstrated their ability to create high impact startups, and the country is blessed with both highly skilled entrepreneurs and specialized programmers.

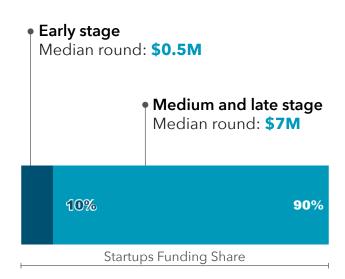
The challenges that Argentina faces are mainly economic; the country suffers from a long term devaluation in the local currency and severe inflation. These challenges were further aggravated by the COVID-19 pandemic, which discouraged foreign investment and drove many international companies to relocate overseas.

Argentina was one of the richest economies in the world 100 years ago, yet its current state of economic uncertainty is not helping local entrepreneurs thrive. There is still too much bureaucracy and red tape in the Argentinian economy, exemplified by the confusing blackmarket exchange rate for the Argentinian Peso.

Despite all this, Argentina is still one of Latin America's biggest economies in terms of GDP, and has the potential to be a powerful regional startup hub. The success of MercadoLibre is truly remarkable; The company became one of the strongest Latin American tech startups after launching online ecommerce and auction platforms. With Auth0, the nation demonstrated its capacity to foster Argentinian-owned unicorns. However, Auth0 demonstrates the difficulties of building an impactful startup in Argentina, as the company was acquired by Okta and is now headquartered in the US.

Hopefully Ualá, the country's newest unicorn, will not follow suit.

Argentina's public sector needs to improve infrastructure and reform legislation to avoid brain drain and attract foregin entrepreneurs. This process was started in 2017 when a new Entrepreneurship Law was passed, and has continued with other legislation like the Knowledge Economy Law. More should be done to ensure local entrepreneurs feel they can create startups with regional and global impact while remaining in Argentina. The country has plenty of tech talent and STEM graduates, and we hope to see them embrace entrepreneurship within the country.





# Notable Startups and Ecosystem Champions

**⇒** Ualá



#### Buenos Aires, Argentina

Ualá is a Fintech company that offers a financial ecosystem through an app, linked to a free international Mastercard.

#### Defiant Wallet

#### Buenos Aires, Argentina

Defiant is a mobile self-custodial multi-blockchain crypto wallet built in Latin America; essentially a web3 browser in your pocket.

#### Let'sBit

#### Rosario, Argentina

Let'sBit offers a digital banking alternative to local and cross-border payments, investments, savings, and trading.

#### **Pantheons**

#### MercadoLibre

#### Buenos Aires, Argentina

MercadoLibre hosts the largest online commerce and payments ecosystem in Latin America.

#### **Our Ecosystem Partner**







# After a 7 spot jump, Indonesia entered the top 40.



Indonesia has entered the top 40 after an impressive jump of 7 spots to rank 38th globally in 2022, continuing its positive momentum for the third year in a row. Indonesia also ranks 9th in the Asia-Pacific region and has become one of the leaders in Southeast Asia, surpassing Malaysia as the 2nd highest ranked country behind Singapore.

Jakarta, the highest ranked Indonesian city, is advancing in a highly competitive environment and closing in on the top 30. It rose by 2 spots to 32nd globally, pushing ahead

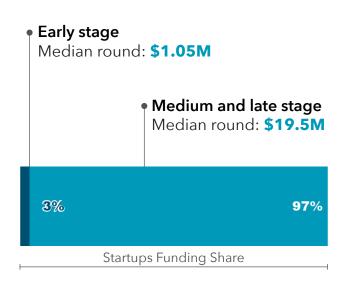
of cities like Miami, Denver, Philadelphia, and Hong Kong. Jakarta ranks 11th among cities in the Asia-Pacific region and remains the 2nd highest ranked startup hub in Southeast Asia, with more than three times the score of its closest contender, Kuala Lumpur. Jakarta is the center of entrepreneurial innovation in Indonesia, ranking 13th for Transportation, 17th for Ecommerce & Retail, and landing in the global top 50 for a number of industries.

There is a sizable gap between Jakarta and the other ranked cities in Indonesia, as the country has no other cities in the global top 400. Bandung is 2nd nationally and 405th globally after a 37 spot fall. Bandung is the only other Indonesian city in the Southeast Asia top 10 besides Jakarta, ranking 9th regionally.

п	National Rank and Change	City	Global Rank and Change	Total Score	Overperforming Industry	
	1 -	Jakarta	32 +2	24.437	Transportation 💃	
	2 -	Bandung	405 <sup>-37</sup>	1.165		
	<b>3</b> +1	Surabaya	709 <sup>+50</sup>	0.363		
	<b>4</b> +2	Medan	902 <sup>-33</sup>	0.197		
	<b>5</b> <sup>-2</sup>	Yogyakarta	904 <sup>-236</sup>	0.197		



The 3rd highest ranked city in Indonesia, Surabaya jumped 50 spots to 709th, while Medan dropped 33 spots to 902nd. Yogyakarta had a significant fall of 236 spots, ending at 904th as the last Indonesian city ranked in the top 1000 globally. Indonesia currently has 5 cities ranked in the global top 1000, after two cities have dropped out from the Index. The Indonesian startup economy is propelled by the strength of Jakarta and its ability to continue advancing against very competitive ecosystems.



# **Startup Ecosystem Overview**

Indonesia has the largest market size in Southeast Asia and a young, talented, internet savvy workforce. With a population over 250 million, Indonesia enjoys the rare advantage of creating massive startups and unicorns that can focus on the low hanging fruit of serving its own domestic economy.

In recent years, improving the country's connectivity has been a focal point for the public sector. For the startup landscape, this translated into additional government support for tech and IT startups. In addition, efforts have been made to attract investment and reduce the regulatory barriers for establishing a business. Still, Indonesian startups face challenges due to high levels of bureaucracy.

Supported by these initiatives, Indonesia has become a leader in Southeast Asia for tech investment. Success stories such as J&T Express, Ovo, and Traveloka are more and more common with startups racing to achieve unicorn status.

With global exposure in events such as <u>Jejala ID</u> (an event that promotes the tech scene in Indonesia), startups in Indonesia are getting the attention they will need to scale up.

Growth in digital infrastructure, partly accelerated by the COVID-19 pandemic, can be a huge gain for Indonesia's startup ecosystems. Cities on the Island of Bali have long been attractive to digital nomads. Now, with better internet connectivity, foreign talent might finally have the opportunity to establish their businesses and form startup hubs in Indonesia. Jakarta is the key startup hub in Indonesia, as most of the country's entrepreneurial activity takes place in the capital city.



# **Notable Startups and Ecosystem Champions**

⇒ Xendit Unicorn

Jakarta, Indonesia

Xendit is a fintech company that provides payment infrastructure across Southeast Asia.

⇒ OVO Unicorn (\*)

Jakarta, Indonesia

OVO is a digital payment and smart financial services platform.

⇒ Ajaib Unicorn 

€

Jakarta, Indonesia

Ajaib is an investing platform that allows Indonesians to buy and sell stocks, ETFs and mutual funds.

#### **Pantheons**

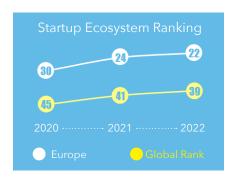
Gojek

Jakarta, Indonesia

Gojek is an app that provides a variety of services from payments, food delivery, transportation, and logistics.

# 39 | Romania

# Romania has entered the top 40 globally.



Romania is advancing in the Index for the third year in a row, moving up the Index by 2 spots to 39th globally, bypassing Malaysia and benefiting from Croatia's decline, and becoming the 2nd highest ranked country in the Balkans region.

The city of Bucharest also showed good results this year and is getting closer to the global top 100. It jumped 3 spots in the Index to 108th globally, and is now the highest ranked city in Romania and in the Balkans region.

Bucharest ranks 8th in Eastern Europe, and it also ranks in the global top 100 for three industries, overperforming in Software & Data at 48th. Much of this rank improvement has to do with the country's successful unicorn, UiPath.

All other Romanian cities have had a substantial loss in their position, with the exception of the newcomer Oradea. The second highest ranked city in Romania, Cluj-Napoca, lost 80 spots to rank 330th globally. Timișoara, 3rd nationally, and Iași, 4th nationally, have fallen in the Index by 151 and 231 spots, and are now 542nd and 715th respectively. Oradea, the newcomer, ranked 758th, while Brasov dropped 147 spots to 853rd globally. With Sibiu and Craiova falling out of the Index, Romania concludes the top 1000 with 6 cities ranked, versus 7 cities in 2021.

ı	National Rank and Change	City	Global Rank and Change	Total Score	Overperforming Industry
	1 -	Bucharest	108 +3	6.765	Software & Data 雄
	2 -	Cluj-Napoca	330 <sup>-80</sup>	1.662	
	3 -	Timisoara	542 <sup>-151</sup>	0.617	
	4 -	lași	715 <sup>-231</sup>	0.355	
	<b>5</b> <i>new</i>	Oradea	758 <sup>new</sup>	0.310	
	<b>6</b> <sup>-1</sup>	Brasov	853 <sup>-147</sup>	0.230	



In response to the results of the Index, the Minister of Research, Innovation and Digitalization, Sebastian Burduja, said:

"The Romanian startup ecosystem has been expanding over the last 5 years, making innovative startups key drivers of economic development, ensuring the growth of successful scalable and sustainable businesses. We believe that Romania has the potential to become one of the leading innovation hubs in Europe, and we are working around the clock to make this happen.

We seek to bring together all the necessary ingredients, most notably knowledge and resources, and make them readily available through institutions and individuals. The Ministry of Research, Innovation, and Digitalization is committed to creating and nurturing the framework required to support the steady and continuous growth of highly innovative startups."

# Startup Ecosystem Overview

Boasting a strong startup ecosystem rooted in Eastern Europe, Romania offers entrepreneurs affordable and highly talented professionals as well as access to the European market. The country is mostly focused on IT and outsourcing, and has created some noticeable hubs in Bucharest, Cluj, Timișoara, and Iași. More than 220,000 Romanians are already taking part in the IT scene, mainly as employees, freelancers, and remote workers for foreign companies capitalizing on the local talent pool.

Outside the capital of Bucharest, the city of Cluj-Napoca has managed to build a name for itself, with ecosystem developers who understand that the path to growth includes a global mindset. Cluj-Napoca has positioned itself both as a Smart City in the making and as an IT cluster.

With the outstanding success story of UiPath, Romania's first unicorn, the country has proven it can foster the entrepreneurial spirit and expand into global markets. In 2021, this trend continued with Elrond, a blockchain platform that surpassed US\$1 billion valuation. While there are public strategies aimed at creating 5 unicorns by 2025, it remains to be seen if the country will manage to achieve this ambitious goal.

Much more can be done in terms of public sector involvement. The Romanian startup ecosystem would benefit from government policies that support startups, as well as an increase in entrepreneurial education via secondary schools and entrepreneurship programs.

More than other EU member states, Romania struggles with keeping talent in the country and has yet to find an effective way of marketing its startup ecosystems to foreign entrepreneurs. To create a narrative of entrepreneurship around Romania, the public and private sectors will need a more unified approach.

Progress is being made, however: ROStartup, a joint public and private action initiative, has set out to create a National Startup Ecosystem Strategy for Romania and tackle the challenges that entrepreneurs face.



Encouraging signs are also coming from younger startup ecosystems such as the one in Oradea, where the tech startups are coming together under the MakelTOradea initiative.

With strong internet connectivity, a healthy number of accelerators and incubators, and a network of entrepreneurs determined to put their ecosystems on the map, we are optimistic that the Romanian startup ecosystem will soon be reaching new milestones.

# Notable Startups and Ecosystem Champions

#### Bitdefender

#### Bucharest, Romania

Bitdefender is a global security technology company that provides advanced threat protection to both business and consumer customers.

#### Questo

#### Bucharest, Romania

Questo is the leading platform for city exploration games, built by local creators and businesses around the world.

#### Elrond

#### Sibiu, Romania

Elrond is a highly scalable, fast, and secure blockchain platform for distributed apps, enterprise use cases, and the new internet economy.

#### **Pantheons**

#### UiPath

#### Bucharest, Romania

UIPath develops robotic process automation software.

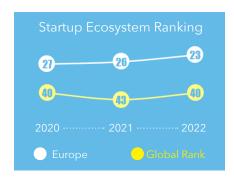
#### **Our Ecosystem Partners**







# Luxembourg jumped 3 spots to rank 40th globally.



Luxembourg is another example of a small nation carving out its own place on the world's top 40 list. Overall, Luxembourg advanced by 3 spots this year to 40th globally, regaining its position from 2020. Luxembourg is ranked 23rd in Europe.

Luxembourg City strengthened its position in the top 200 and now ranks 175th globally after advancing 11 spots. It is also ranked in the top 100 European cities (58th), and overperforming in Hardware & IoT, ranking 34th globally.

Luxembourg's second ranked startup ecosystem, Esch an der Alzette, dropped out of the top 500 this year, falling 84 spots to 573rd globally.

National Rank and Change	City	Global Rank and Change	Total Score	Overperforming Industry	1
1 -	Luxembourg City	175 <sup>+11</sup>	4.617	Hardware & IoT	
2 -	Esch an der Alzette	573 <sup>-84</sup>	0.545		

For more information about the rankings of cities, view the country dashboard on Startublink.com.

# **Startup Ecosystem Overview**

Luxembourg is one of Europe's most successful economies and is known as a strong traditional finance capital. However, a high cost of living and a small local market size are hurdles for the future trajectory of the national ecosystem. The public sector is taking an active approach in fostering positive change with projects like <u>Digital Luxembourg</u>, a collaborative government initiative that strengthens the country's digital efforts while mentoring and guiding startups.

Public and private sector players work alongside entrepreneurs in Luxembourg to help entrepreneurs during their startup journey.



Initiatives cover a wide variety of fields, from hands-on advice regarding practical business knowledge provided by the House of Entrepreneurship to the coaching and seed funding offered by the acceleration program Fit 4 Start, managed by Luxinnovation, to assistance with reaching international markets through Catapult or Gener8tor.

Luxembourg is focused on developing a startup ecosystem centered on data-driven innovation. The country's digital infrastructure, which is already outstanding in terms of connectivity, cybersecurity expertise, and secure data storage capacities, is being further boosted by the business-oriented high performance computer (HPC) MeluXina that launched in spring of 2021.

# **Notable Startups and Ecosystem Champions**

⇒ OCSiAl Unicorn (\*)



#### Luxembourg City, Luxembourg

OCSiAl develops low-cost technology with unlimited scaling potential for the mass production of graphene nanotubes.

#### Shipsta

#### Luxembourg City, Luxembourg

Shipsta is a logistics intelligence platform intended for strategic and tactical logistics procurement.

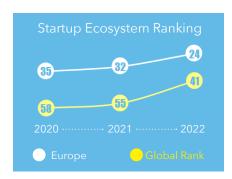
#### UFODRIVE

#### Mamer, Luxembourg

UFODRIVE develops an app for a fast and easy car rental experience.



# Iceland breaks into the top 50 for the first time.



The small nation of Iceland has had an amazing year, jumping no less than 14 spots to rank 41st globally and 9th in Northern Europe. Not only does this jump position Iceland well within the world's top 50; it is the biggest jump among all countries in the top 50 this year. Iceland deserves commendation for outranking countries with substantially larger populations and economies, and for keeping up the positive growth of its startup economy for the third year in a row.

Reykjavik is the highest and only ranked city in Iceland, registering a 12 spot increase to 209th globally and approaching the world's top 200. As our analysis in the Top Island Cities chapter reveals, Reykjavik is the 2nd highest ranked island city, and the highest ranked island city in the population tier of 100k - 300k. Reykjavik ranks in the global top 100 for the Social & Leisure industry.

National Rank and Change	City	Global Rank and Change	Total Score	Overperforming Industry
1 -	Reykjavik	209 <sup>+12</sup>	3.871	Social & Leisure

For more information about the rankings of cities, view the country dashboard on Startublink.com.

# **Startup Ecosystem Overview**

The Icelandic startup ecosystem is impressive, especially considering the country's demure size and population of just over 360,000. A harsh climate compels Iceland to build strong physical infrastructure, which has fostered an innovative spirit born from necessity. Icelandic entrepreneurs are also compelled to have a global focus from

the beginning, given the country's small consumer market. In addition, Iceland values education, and the nation is well known for high literacy rates and skilled tech workers.

Iceland developed the entrepreneurial spirit of its population and shifted from the traditional employment model towards the gig economy, even in the IT sector which offers much more flexibility.



For the startup scene, Iceland makes itself attractive by offering favorable legislation and one of the lowest tax rates in Europe. Icelandic entrepreneurs also benefit from a number of government incentives, particularly in the R&D and green energy sectors. In addition, Iceland creates favorable legislation for investments. For example, the country offers a Golden Investor Visa as well as set up initiatives like Startup Reykjavik to connect local startups with foreign investors.

Iceland's small population may be seen as a challenge, but the country's position between North America and Europe means fast travel times to bigger consumer markets. Further, Iceland has great international relationships: it is a member of the EFTA convention, it participates in a Single Market with the EU through the EEA agreement, it has established a Free Trade Agreement with China, and it is a member of the Schengen area.

Iceland is on a mission to increase innovation and competitiveness, and we are positive that this approach will prove beneficial for the startup scene.

# Notable Startups and Ecosystem Champions

#### AlvoTech

#### Reykjavík, Iceland

AlvoTech broadens the availability and accessibility of biosimilars.

#### Lucinity

#### Reykjavík, Iceland

Lucinity delivers an open productivity platform for AML (Anti-Money Laundering) compliance.

#### Kaptio

#### Reykjavík, Iceland

Kaptio is the next generation booking system that places customer experience at the heart of the travel economy.



# Malaysia ranks 3rd in Southeast Asia.



Malaysia dropped 2 spots in the Index to 42nd globally, but the scores of the countries ranked 39th to 42nd remain very close, implying that this is merely a small drop in relative strength. Regionally, Malaysia was overtaken by Indonesia, dropping one spot to rank 10th in Asia Pacific and 3rd in Southeast Asia. Malaysia has an advanced business environment, ranking first in Southeast Asia by Business score.

Kuala Lumpur, the highest ranked city in Malaysia, still ranks in the global top 100 despite dropping 8 spots to 88th globally. Kuala Lumpur is now the 3rd highest ranked startup ecosystem in Southeast Asia, surpassing Bangkok. The city ranks in the top 100 startup cities in 8 of 11 industries, with the most notable results in Edtech, ranking 23rd.

All Malaysian cities have dropped in the Index this year, except George Town which is ranked 2nd nationally, advancing 8 spots to 341st.

After having 4 new cities entering the Index last year, for a total of 5 Malaysian cities in the global top 1000, Malaysia was not able to continue its ecosystem diversification. With 2 cities dropping out of the Index, Senai and Sandakan, Malaysia is left with 3 cities in the global top 1000.

п	National Rank and Change	City	Global Rank and Change	Total Score	Overperforming Industry	
	1 -	Kuala Lumpur	88 <sup>-8</sup>	8.006	Edtech	
	2 -	George Town	341 +8	1.581		
	3 -	Johor Bahru	998 <sup>-250</sup>	0.156		



# **Startup Ecosystem Overview**

Despite its strategic geographic location in the Asia-Pacific region, offering potential access to huge regional markets, Malaysia has yet to fully realize its potential. The talent and positive mindset are there, but the easing of regulation and bureaucracy is crucial for growth. It is encouraging to see that Malaysia now has the **Shared Prosperity Vision 2030**; As part of reaching the goal of shared prosperity, this new strategy includes an area of focus for startups. In addition, the government launched the MYStartup platform to provide startup ecosystem stakeholders with resources and opportunities. MYStartup was also tasked with launching the **Startup Ecosystem** Roadmap (SUPER) 2021-2030, a plan that seeks to put Malaysia among the world's top 20 startup hubs.

Another major milestone for Malaysia is its first unicorn. Carsome, a used car ecommerce platform, crossed the US\$1 billion valuation threshold in 2021.
According to Malaysia's Digital Economy Blueprint, the country plans to foster five more unicorns in its key digital industry clusters by 2030. Even though the country has a relatively big consumer market, which could tempt startups to be inward-focused, we hope to see more entrepreneurs in Malaysia take risks and scale to international markets.

#### **Our Ecosystem Partner**



# Notable Startups and Ecosystem Champions

Carsome



#### Selangor, Malaysia

Carsome is a used car ecommerce platform that provides efficient car selling services to individuals and legal entities.

#### Pop Meals

#### Kuala Lumpur, Malaysia

Pop Meals is a food delivery service that utilizes artificial intelligence in logistics and cooking automation.

#### PolicyStreet

#### Kuala Lumpur, Malaysia

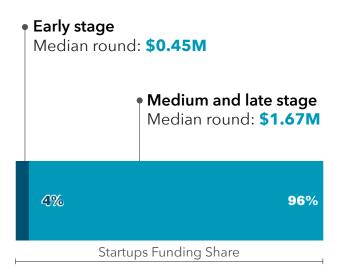
PolicyStreet is an online platform that makes the process of buying insurance more efficient.

#### **Pantheons**

### Mindvalley

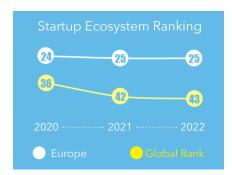
#### Kuala Lumpur, Malaysia

Mindvalley incubates and accelerates businesses that innovate on transformational education for all ages.





# Latvia's startup scene lags behind other Baltic countries.



Latvia is still ranked among the top 50 countries worldwide after falling one spot this year to 43rd. Latvia is 8th in Eastern Europe, but it strongly lags behind the other 2 Baltic states of Estonia and Lithuania. An examination of Latvia's subscores reveal that the country boasts an entrepreneur-friendly business environment, and its Quantity score is highly competitive. Yet, Latvia scores very low on Quality, at 56th worldwide, showing that the country has challenges in producing high impact startups.

Riga, the only ranked city in Latvia, fell 42 spots to 197th globally. While Riga ranks in the top 80 European cities, it lags far behind the Baltic capitals of Tallinn and Vilnius, and even falls behind Kaunas. Riga performs best in Edtech and Fintech, ranked in the global top 100. Given that Riga is the only ranked city in Latvia, the country's global position currently depends entirely on Riga's startup scene.

п	National Rank and Change	City	Global Rank and Change	Total Score	Overperforming Industry	
	1 -	Riga	197 <sup>-42</sup>	4.300	Edtech	



# **Startup Ecosystem Overview**

Latvia's startup ecosystem has the potential to become one of the country's core economic engines. With easy access to Europe, an availability of skilled IT talent, and an affordable cost of living, the potential of Latvia's startup ecosystem is clear. The country also benefits from a number of initiatives that make the location attractive, such as innovation vouchers and a startup-friendly regulatory system. Perhaps the most forward thinking of these regulations is the country's Startup visa program, a government initiative aimed at attracting foreign entrepreneurs.

The talented multilingual and diverse population is a great asset to Latvia's startup ecosystem. However, Latvia suffers from brain drain as qualified workers immigrate to other EU countries; the public sector should do more to demonstrate the benefits of staying in Latvia. The government should also continue to cooperate with the private sector in devising new strategies, such as the stock option policies that were amended in 2020. This type of cooperation could allow the Latvian startup scene to close the gap with its more successful Baltic neighbors.

# Notable Startups and Ecosystem Champions

#### Nordigen

#### Riga, Latvia

Nordigen is a free open banking API that provides PSD2 data connections to all major European banks.

#### 4finance

#### Riga, Latvia

Europe's largest online and mobile consumer lending group, providing convenient and responsible access to credit across 16 countries.

#### **⇒** Fixar

#### Riga, Latvia

FIXAR is a leading software and aircraft design developer, powering commercial autonomous UAVs for industrial applications.

# 44 | Colombia

# Colombia jumps 3 spots to rank 44th globally.



Colombia advanced 3 spots this year, now ranking 44th globally and 4th in South America. The country's subscores tell an interesting story; Colombia has the 2nd lowest Business score among the countries ranked in the 40s, implying that the country's business environment lags behind its competitors. This may also explain why the country's Quantity score is low (2nd worst among the countries ranked in the 40s): a challenging business environment reduces the willingness and ability of founders to start a business. And yet the country's Quality

score is the highest among countries ranked in the 40s, showing the strong potential of local founders. These insights provide a strong indication that the Colombian economy can benefit greatly from improving its business environment, because local talent has shown its ability to achieve results.

Ranked 1st in Colombia, the city of Bogota had a substantial jump of 7 spots in the Index to rank 70th globally, 4th in South America, and 5th in the Latin America & Caribbean region. Bogota also ranks 35th for Ecommerce & Retail.

Medellin is the only Colombian city that dropped this year, falling 22 spots to 205th globally and losing its place in the world's top 200, but remaining the 2nd highest ranked city nationally. This is the third year in a row that Medellin has dropped in the Index. Regionally, however, Medellin climbed two spots to rank 8th in South America, profiting from even greater declines by Belo Horizonte, Montevideo, and Porto Alegre.

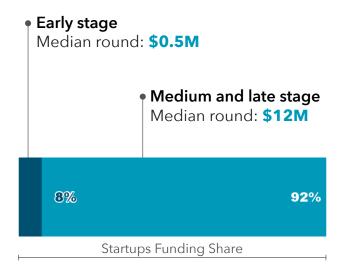
National Rank and Change	City	Global Rank and Change	Total Score	Overperforming Industry	
1 -	Bogota	70 +7	9.467	Ecommerce & state Retail	
2 -	Medellin	205 <sup>-22</sup>	3.989		
3 -	Cali	293 <sup>+5</sup>	2.214		
4 -	Barranquilla	426 <sup>+410</sup>	1.067		

3rd nationally, Cali slightly increased in rank this year, ascending 5 spots to 293rd and holding its position in the global top 300. This is the 3rd year in a row in which we see Cali climb the ranks, realizing significant progress.

4th nationally, the city of Barranquilla has made one of the biggest jumps of 2022, breaking into the top 500 globally. Barranquilla leapt up an amazing 410 places to 426th globally.

# **Startup Ecosystem Overview**

Colombia has seen an immense geopolitical recovery since 2000 and its startup ecosystems have followed suit with impressive advances, transforming the country into a regional Latin American startup hub. Offering both affordability and a strong relationship with neighboring countries, Colombia boasts one of the strongest startup scenes in South America. Colombia's ecosystem emergence is truly unique, and serves as an inspiration to countries wondering whether they can transform into regional or even global tech leaders.



The US\$1 billion investment of Softbank in Rappi, a Colombian delivery app, is a powerful signal that shows the potential of Colombian startups as they take the lead in the region.

More startups such as Plazzi and Ontop are lining up to follow in Rappi's footsteps. By continuing to improve the infrastructure of the country, the public sector can ensure quality of life is high enough to retain Colombian entrepreneurs while attracting more foreign talent.

Colombia's startup ecosystems benefit from public initiatives aimed at promoting startups, along with a variety of accelerators and incubators, to help launch early stage ventures. The government has also created a favorable climate for investment and made several types of investment visas available. Colombia is unique in the proactive approach of its municipal chambers of commerce towards startup ecosystem development; In most countries, chambers of commerce are focused on classic industries, but in Colombia the focus is squarely on future economic growth.

Contributing to these public sector initiatives are some additional notable stakeholders like Bogota Chambers of Commerce, iNNpulsa Colombia, and Invest in Bogota. Also noteworthy, Ruta-N is taking the lead in the development of the Medellin ecosystem. While Bogota is the national leader when it comes to the maturity of a startup ecosystem, there are a few younger hubs attracting more and more attention.



Medellin, for instance, is an increasingly popular location for expats and digital nomads to work on their startups. This gives a significant international boost to the local startup ecosystem.

Colombia's startup ecosystem is experiencing an increase in technical talent due to multiple government initiatives aimed at increasing technological literacy in smaller cities around Colombia. This is exemplified in the city of Cali, one of the most innovative startup ecosystems in Colombia alongside Medellin and Bogota.

By taking an active approach to ecosystem development, and supported by the Chamber of Commerce, Cali's startup ecosystem has become a fundamental part of Colombia's startup scene and a strategic center of innovation in the Andes region of Latin America.

# Notable Startups and **Ecosystem Champions**

⇒ LifeMiles Unicorn 

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#### Bogota, Colombia

LifeMiles is the unified and improved frequent flier program for Avianca and TACA.

#### Treinta

#### Bogota, Colombia

Treinta is a digital ledger app for Latin American microbusinesses.

#### La Haus

#### Medellin, Colombia

La Haus is a residential marketplace used to help people find an ideal home.

# **Pantheons**

## Rappi

#### Bogota, Colombia

Rappi is a consumer tech company that specializes in providing online delivery services.

# **Our Ecosystem Partners**



**NN**pulsa







# **Our Report Partners**



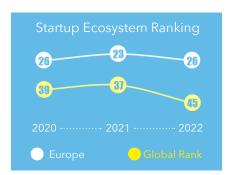




Please refer to the ecosystem case study section to read a detailed analysis of Cali's and Bogota's startup ecosystem.



# In spite of a negative momentum, Croatia remains in top 50 globally.



Croatia had a substantial decrease of 8 spots to rank 45th globally, showing that its growth momentum has slowed down. Regionally, Croatia is ranked 3rd in the Balkans, losing its 2nd position to Romania, and still unable to threaten Bulgaria's top position. However, Croatia ranks 1st in the Balkans on Business score, showing it has the most entrepreneur-friendly business environment regionally.

The highest ranking Croatian city, Zagreb, has not managed to compete with its counterparts and has dropped 16 spots this year to 194th globally. However, Zagreb ranks 15th in Eastern Europe and 5th in the Balkans. In ex-Yugoslavia countries, Zagreb is now ranked lower than Ljubljana (190th globally), and better than Belgrade (200th globally).

Zagreb is not the only Croatian city to have negative momentum. In fact, all ranked Croatian cities have dropped in the Index. This included 3 cities dropping completely from the Index, leaving Croatia with three cities in the global top 1000, versus six cities in 2021.

Ranked 2nd nationally, the port city of Rijeka ranks 450th globally after a 12 spot decrease. Likewise, Split, ranked 3rd in Croatia, decreased 13 spots to 603rd globally. City rankings show that Zagreb is the dominant startup ecosystem in Croatia, and work should be done both on decentralization and on stronger development of other local ecosystems to boost the national startup economy, while at the same time making an effort to keep Zagreb in the top 200.

National Rank and Change	City	Global Rank and Change	Total Score	Overperforming Industry	
1 -	Zagreb	194 <sup>-16</sup>	4.329	Software & Data 雄	
<b>2</b> <sup>+1</sup>	Rijeka	450 <sup>-12</sup>	0.909		
<b>3</b> +1	Split	603 <sup>-13</sup>	0.501		



Croatia boasts one of the most promising startup scenes in the Balkans. The center of startup activity in Croatia, the capital of Zagreb, is developing into a regional startup hub. There is a strong support network in the city with many startup events and conferences, and the country's EU membership facilitates expansion into other European markets. In recent years, Croatia has shown its remarkable potential after joining the unicorn club with Infobip.

Some of the main challenges that the Croatian ecosystems face are related to startup risk aversion, low government investment in R&D, unfriendly business regulations, and difficulty accessing funding for startups to scale. There is too much focus on grants rather than investment. Government support helps, but also creates a closed system that should prioritize opening to the EU and global market.

Croatia has a skilled talent pool, but there has been an increasing trend of young people leaving the country and/ or registering their companies outside of Croatia. Most young Croatian IT companies choose agency work over creating their own tech company through innovative products and services. This is also connected to a lack of early stage investors, particularly pre-seed and seed stage VCs, which will allow Croatian startups to grow and scale. Furthermore, Croatia lacks a serious government strategy to develop the national startup economy. In R&D, government support programs favor large companies, while links between universities and industry are limited.

Although Croatia has made near term progress by cutting red tape, there is still work to be done in digitizing the whole process, as well as in the reform of tax and regulatory mechanisms that pose various barriers and pitfalls for young companies and startups in particular.

Croatia is actively working on these challenges. An investment platform of over US\$ 40 million will be launched by the end of 2022 to support innovation, scientific research, and the protection of intellectual property in Slovenia and Croatia.

Another notable milestone is the creation of the national Croatian startup association CRO STARTUP, which focuses on core challenges in Croatian startup ecosystems, such as regulatory barriers.

There are some prominent accelerators and incubators in Croatia, such as ZICER, the Bird incubator (founded in early 2021 with the aim of helping startups with software ideas related to data analytics, artificial intelligence, and machine learning), Poduzetnički inkubator BIOS, and the Science and Technology Park Step Ri.

Infobip also launched the Infobip Startup Tribe in 2021. This new global startup program seeks out innovative and impactful startups and assists them with growth tools, credit allowances, and network support.

There are many startup events and conferences, and numbers are increasing annually. Startups can find support, funding, and exposure with events such as Zagreb Connect, Idea Knockout, Shift, Get in the Ring Split, and GROWit.



In order to attract foreign talent, Croatia introduced the Digital Nomad Residence Permit, also known as the "Digital Nomad Visa," in 2021, which allows non-EU nationals to live in Croatia long-term.

Croatian tech company growth over recent years has been impressive, and the country is becoming the leading technology hub in the immediate region. With success stories such as Infobip and Rimac, we are confident that the Croatian startup ecosystems will continue their growth in the years to come.

# Notable Startups and Ecosystem Champions

Infobip



#### Vodnjan, Croatia

Infobip is a global leader in omnichannel engagement, powering a range of messaging channels, tools, and solutions for advanced customer engagement.

## Rimac Automobili

## Zagreb, Croatia

Rimac Automobili produces fast and exciting electric vehicles.

#### Gideon Brothers

#### Zagreb, Croatia

Gideon Brothers solves industrial problems with autonomous mobile robots powered by AI & Visual Perception.

# **Our Ecosystem Partner**





# Istanbul is advancing 3 more spots in the rankings.



Turkey saw a decrease of 2 spots in 2022 and now ranks 46th globally.

Istanbul, the highest ranked city in Turkey, enjoyed good momentum this year, increasing 3 spots to 66th globally. Regionally, it ranks 18th in Europe. Istanbul ranks high in the Social & Leisure and E-commerce & Retail industries, making the global top 50 for both.

All other Turkish cities have dropped in the Index this year, explaining the decline of Turkey's national rank. The

second highest ranked Turkish city, Ankara, decreased 70 spots to 280th, continuing its negative momentum from 2021. Ranked 3rd nationally, Izmir decreased to 409th after falling 25 spots, while Antalya, 4th nationally, fell 168 spots to 817th globally.

Five Turkish cities dropped from the Index this year, and Turkey now has a total of 4 cities ranked in the global top 1000 versus 9 cities in 2021, revealing a central dependence on Istanbul.

п	National Rank and Change	City	Global Rank and Change	Total Score	Overperforming Industry
	1 -	Istanbul	66 +3	9.908	Social & Leisure
	2 -	Ankara	280 <sup>-70</sup>	2.394	
	3 -	Izmir	409 -25	1.154	
	4 -	Antalya	817 <sup>-168</sup>	0.257	





The Turkish ecosystem enjoyed a growth period which stopped several years ago due to geopolitical and economic challenges, causing a lack of both foreign and local investment in the ecosystem. In spite of this turmoil, 2021 was a record year for Turkish startups. The gaming industry is attracting global interest with unicorns such as Dream Games, and Turkey is pushing forward in other industries; Getir, a leader in delivery services, recently became a decacorn. The Turkish public sector understands the massive potential startups have as an economic engine, and municipal development agencies are focusing on creating policies and programs to grow local ecosystems.

The Turkish startup ecosystem offers entrepreneurs a foothold in Europe, Asia, and the Middle East, while allowing access to a talented population focused on entrepreneurship and scaling startups. Turkish entrepreneurs are highly skilled, prefer a proactive approach, and exhibit a sense of community and true interest in helping the local startup ecosystem grow. If the public sector gives the tech ecosystem the stability and tools it needs, Turkey will move closer to fulfilling its immense potential. Specifically, the international ecosystem of Istanbul could evolve into a regional MENA startup hub.

# Notable Startups and Ecosystem Champions

Getir



## Istanbul, Turkey

Getir is a technology company that helps deliver goods in urban areas.

Dream Games

Unicorn (

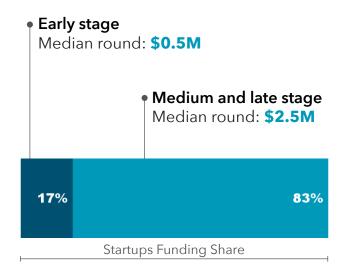
# Istanbul, Turkey

Dream Games is a leading mobile gaming company based in Istanbul.

#### **○** Martı

## Istanbul, Turkey

Marti is a micromobility company in MENA and Eastern Europe.



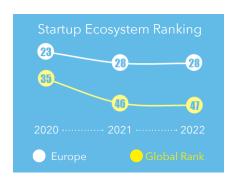
# **Our Ecosystem Partners**







# Slovenia continues its decline, but Ljubljana rises locally.



Slovenia dropped by one spot to rank 47th globally, unable to reverse the steep decline it experienced in 2021. Nevertheless, Slovenia ranks 11th in Eastern Europe and holds position as 4th in the Balkans.

Slovenian cities have continued a negative trajectory for the 2nd year in a row. Ljubljana, Slovenia's highest ranked city, managed to stay in the top 200 despite falling 6 spots to 190th globally. In spite of its overall decline, Ljubljana climbed two positions in the Balkans, now ranking 4th

regionally thanks to even greater declines by Zagreb and Belgrade. Ljubljana shows good results in Software & Data, making the top 100 at 86th globally.

Maribor, 2nd nationally, saw a massive drop of 315 spots to 720th, continuing a negative trend from 2021.

Novo Mesto lost its place in the Index this year. Consequently, Slovenia has a total of 2 cities in the global top 1000 compared to 3 cities last year.

п	National Rank and Change	City	Global Rank and Change	Total Score	Overperforming Industry	П
	1 -	Ljubljana	190 <sup>-6</sup>	4.375	Software & Data	
	2 -	Maribor	$720^{-315}$	0.351		

For more information about the rankings of cities, view the country dashboard on Startublink.com.

# **Startup Ecosystem Overview**

Slovenia has the most vibrant economy of all the ex-Yugoslavia countries, as it enjoys proximity to both East and West, bordering Austria, Croatia, Hungary, and Italy. The country's startup ecosystems have been actively developed in recent years. This includes active efforts from the public sector to improve regulations and provide entrepreneurs with better conditions for innovation.



Slovenia's ecosystem has achieved significant investment and exit opportunities for startups. An example of an exit is Bitstamp, which increased media attention and awareness of available opportunities, in fintech and beyond, and attracted younger generations largely interested in IT development due to the increasing viability of career options.

National startup awards, along with national entrepreneurship, are well supported by the Slovenian government, which extensively supports the PODIM conference and startup support events. Slovenia has also made progress in simplifying administrative procedures for foreign investors and entrepreneurs.

Alongside this public sector support, Slovenian startups are amongst some of the most successful per capita on crowdfunding websites like Kickstarter. Early-stage startups are also heavily financed by public sources, including the Slovenian Enterprise Fund.

An investment platform of over US \$40 million will be launched by the end of 2022 to support innovation, scientific research, and the protection of intellectual property in Slovenia and Croatia. This is an initiative of The European Investment Fund (EIF), Slovenia's national promoter bank (SID Banka), and the Croatian Bank for Reconstruction and Development (HBOR).

Slovenia offers entrepreneurs and startups the opportunity to experiment, crowdfund, grow, and expand. The country has many innovation hubs and programs that support startups in their initial phase of development. One notable independent initiative is <u>Startup Slovenia</u>,

an open platform of the Slovenian startup ecosystem that supports innovative entrepreneurship.

Regionally, Slovenia is struggling to defend its status as a startup and economic hub with the growth of startup ecosystems in more populated countries such as Croatia and Serbia, all of which share a relatively similar language. However, Slovenia's startup ecosystem has not moved fast enough to solidify itself as the leading regional hub.

Going forward, we believe Slovenia can form a powerful ecosystem like other small population countries in Europe, such as Estonia and Lithuania, enjoying the ability to move fast and implement revolutionary strategies as a small country. The only question is whether the public sector will execute non-traditional development strategies or play it safe and forgo meaningful impact.

# Notable Startups and Ecosystem Champions

#### Viberate

# Ljubljana, Slovenia

Viberate is a music network that collects and analyzes data points of musicians, venues, events, and other music industry stakeholders.

# **⊃** Juicy Marbles

#### Kamnik, Slovenia

Juicy Marbles makes plant-based steaks.

# **⇒** Elly

#### Ljubljana, Slovenia

Elly (previously Eligma) synergizes payment methods and additional POS services into one solution, transforming the POS terminal into a tool for business growth.

# 48 | Greece

# After a jump of 6 spots, Greece reenters the top 50.



Greece reenters the top 50 after climbing 6 spots, now ranking 48th globally and 5th in the Balkans, jumping over Serbia and reversing last year's negative momentum. Greece's climb up the Index has been realized thanks to the startup ecosystem of Athens, which had a massive jump of 21 spots, entering the global top 150. It is ranked 132nd globally and the 3rd ranked city in the Balkans. Additionally, Athens ranks high in the top 100 global ecosystems for the Social & Leisure industry at 51st globally.

Except for Athens, all other Greek cities have dropped in the Index. 2nd in Greece, Thessaloniki had a significant fall this year, dropping 128 spots to 507th globally. With loannina and Rhodes falling out of the Index, Greece has now only 2 cities ranked in the top 1000, versus four cities in 2021. These results show how centralized the Greek startup scene is.

In response to the results of the Index, the Greek Deputy Minister of Development and Investments, Dr Christos Dimas, said:

"StartupBlink has been a valuable source of information with regard to the startup ecosystems around the globe and their performance, based on a set of 3 important criteria. The Greek Government cooperated closely with StartupBlink by providing reliable information for the Greek innovation ecosystem.

We are content to see that Greece's Startup Ecosystem rankings have improved in terms of quantity, quality and impact of the ecosystem. Over the last couple of years, the Ministry of Development and Investments has created "Elevate Greece", which evaluates, monitors, supports and promotes Greek startups in a number of ways."

п	National Rank and Change	City	Global Rank and Change	Total Score	Overperforming Industry	1
	1 -	Athens	132 <sup>+21</sup>	5.530	Social & Leisure	
	2 -	Thessaloniki	507 <sup>-128</sup>	0.709		



Despite being heavily impacted by the economic crisis in 2008 and by the COVID-19 pandemic in 2020, Greece remains resilient. In 2021, Greece increased startup funding, creating exits and lining up companies to become unicorns. This has attracted global attention to the startup ecosystems of the country and its tech potential. Greece enjoys close proximity to European markets, the Middle East, and Africa, which would all support the creation of a regional tech hub.

The country has the advantage of a highly skilled English speaking workforce and a promising IT sector. However, the challenge is keeping this talent in the country while also fostering an entrepreneurial mindset through education and training. With bureaucracy and a scattered network of ecosystem stakeholders, the budding startup landscape of Greece still has a long way to go.

The public sector can help with these challenges by developing a network for promoting and mentoring potential entrepreneurs, by facilitating access to information, and by growing investor interest in early stage startups. EquiFund, a fund-of-funds, is taking an active role in bridging the gap left by low venture capital and private equity activity. Resources such as Elevate Greece are starting to bring together startups and investors to provide a more comprehensive look at the startup landscape.

Where bureaucracy is concerned, the government should be making entrepreneurs' lives easier. This is extremely important in Greece, as we have met freelancers and entrepreneurs who feel it is unnecessarily hard to begin freelancing or to embark on an entrepreneurial path due to overwhelming bureaucracy and social security costs. Greece has a reputation for making it hard to do business, and before major reforms take place to make the economy more competitive, digital nomad visas and positive publicity would create real impact. We do see improved policies starting to appear, and the results are noticeable. This year, Greece hit the unicorn milestone with PeopleCert and Viva Wallet, showing its capacity to create global companies.

The ongoing digital transformation of Greece, aided by EU funding programs, sends encouraging signals for the future. The startup ecosystems of Greece have a huge potential for development, and with the right public initiatives, Greece could become a mature regional startup hub.

# Notable Startups and Ecosystem Champions

**⇒** Viva Wallet



Athens, Greece

Viva Wallet is a safe way to make online payments and transfer money without any billing.

# PeopleCert

Athens, Greece

PeopleCert is a leading player in the global certification industry.

# Spotawheel

Athens, Greece

Spotawheel is a tech-driven used car dealership platform that emphasizes customer trust.

# **Our Ecosystem Partner**



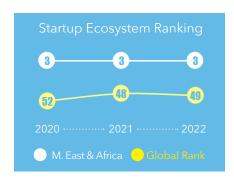
# **Our Report Partners**





# 49 | South Africa

# South Africa is the only country in Africa to rank in the top 50.



South Africa decreased by one spot to 49th globally, keeping its position as the first and only country in Africa in the global top 50 since the first release of the StartupBlink Index in 2017.

All South African cities have shown negative momentum this year.

1st nationally, Cape Town has decreased by 2 spots to 147th globally, but has moved up to the 2nd highest ranked city in Africa at the expense of Nairobi. Although

decreasing 6 spots to 158th globally, Johannesburg ranks 2nd nationally and is climbing to 3rd position in Africa, also profiting from Nairobi's decline. Both Cape Town and Johannesburg are South Africa's first tier cities, with Cape Town overperforming in Edtech at 58th worldwide, and Johannesburg ranking in the global top 100 for Software & Data.

South Africa's second tier cities declined as well. Pretoria has seen a significant fall of 170 spots to 660th, with Durban taking its place as the country's 3rd ecosystem after falling 9 places to 577th.

After Nigeria's representation in the global top 1000 dropped from 7 cities to 3, South Africa displaced Nigeria as the country in Africa with the highest number of ranked cities at 4.

п	National Rank and Change	City	Global Rank and Change	Total Score	Overperforming Industry	
	1 -	Cape Town	147 -2	5.169	Edtech	
	2 -	Johannesburg	158 <sup>-6</sup>	4.935	Software & Data 雄	
	<b>3</b> <sup>+1</sup>	Durban	577 <sup>-9</sup>	0.538		
	<b>4</b> <sup>-1</sup>	Pretoria	660 <sup>-170</sup>	0.426		



The South African startup ecosystem is one of the most promising on the continent. With economically successful cities like Cape Town and Johannesburg, South Africa has a vibrant, private sector led startup scene. Cape Town in particular has emerged as a tech hub, and has attracted direct foreign investment as well as talented workers from around the country. It is easily Africa's biggest digital nomad hub, and there has been massive growth in available funding for early-stage investment thanks to forward thinking public initiatives. A major milestone for this country is the coming together of a network of startup ecosystem stakeholders to create the South Africa Startup Act. This initiative sets out to create a favorable policy environment for entrepreneurship with support from the public sector.

With Naspers investing heavily in South African tech entrepreneurs, and VCs like Knife Capital commiting to funding startups, South Africa has seen much growth in its startup ecosystems. The Silicon Cape Initiative, Endeavor South Africa, and Digital Collective Africa have been some of the main enablers and promoters driving this growth.

South Africa still faces a number of challenges, including a lack of angel investors and brain drain. Going forward, South Africa's startup founders and entrepreneurs need to focus on creating scalable business models that target the international market.

# Notable Startups and Ecosystem Champions

Cell C



#### Sandton, South Africa

Cell C is a customer-first mobile operator that promotes digital inclusion to enhance lives.

# Stitch Money

## Cape Town, South Africa

Stitch is an API fintech that makes it easier for businesses to connect to the users' financial accounts, access data and enable payments.

# SmartWage

#### Cape Town, South Africa

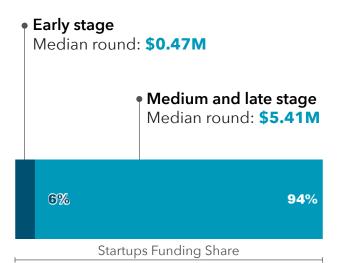
SmartWage is a smart solution that gives employees instant access to their earnings.

# **Pantheons**

# Naspers

# Johannesburg, South Africa

Naspers is a global internet group and one of the largest technology investors in the world.



# **Our Ecosystem Partner**





# Ukraine holds its place in top 50 globally.



Due to the effects of the war, Ukraine had a strong decrease of 16 places but managed to remain in the global top 50, ranked 50th. It ranks 30th in Europe, after decreasing 9 spots in the regional ranking.

All Ukrainian cities have dropped substantially in the Index, but Kyiv maintains its position in the global top 100, proving its resilience. Kyiv dropped 45 places but remains the highest-ranking city in Ukraine, and the only one in the top global 100 at 93rd. Kyiv is most notably ranked in the

top 25 globally for Marketing & Sales and Software & Data industries.

All other Ukrainian cities fell significantly in ranking, dropping below 700th. Odessa, now 2nd nationally, has fallen 348 spots to 742th globally. Lviv, which booked excellent results in 2021, lost its position as the country's 2nd highest-ranking city and decreased 494 spots to 749th. Kharkiv has fallen 342 spots to 855th.

Compared to last year when it had six cities in the top 1000, Ukraine now has four cities, after Ternopil and Dnipro dropped out of the top 1000.

Our analysis of Ukraine may not fully reflect the situation, as more time is needed to understand the effects of the war and the country's ability to rebuild its infrastructure and its economy.

п	National Rank and Change	City	Global Rank and Change	Total Score	Overperforming Industry	
	1 -	Kyiv	93 <sup>-45</sup>	7.892	Marketing & Sales	
	<b>2</b> <sup>+1</sup>	Odessa	$742^{-348}$	0.325		
	<b>3</b> <sup>-1</sup>	Lviv	749 <sup>-494</sup>	0.320		
	4 -	Kharkiv	855 <sup>-342</sup>	0.230		



As Ukraine bravely faces war, it is difficult to say what the after effects on the startup scene will be and how fast Ukraine will rebuild its physical and economic infrastructure. The country had been going through economic difficulties for several years before the war, but still managed to create technology that is both scalable and global. This attests to their talented and resilient workforce.

Some examples of impressive startups originating in Ukraine are Grammarly, Gitlab, and Ahrefs, all with massive global member bases. A main reason for Ukraine's success is the talent of their developers, who are sought after by many foreign companies, either remotely or in local development centers.

One major challenge that the Ukrainian startup ecosystem will be facing is, ironically, unprecedented support from other European nations that allows Ukranians to live and work in their countries for extended periods. This assistance is much needed in time of war, but we can only hope that Ukranian tech and IT talent will come back home once the war is over, and forego relocating to their new host countries, so that we see Ukrainian ecosystems regain their previous strength. The international business community is also coming together to show support for Ukrainian startups: Google launched the **Ukraine** Support Fund, and Network VC (USA) established both a Special Venture Fund and a Support Ukrainian Startups program.

Prior to the war, the government and international organizations took notice of Ukrainian startup economy potential, and although resources were relatively scarce,

some initiatives were taken to support growth. In 2019, Ukraine's Startup Fund was established and a Strategic Vision for 2025 was developed. The strategy focused on supporting early-stage startups through funding and promoting access to support services, as well as to solidify globally-competitive incubation and acceleration programs. More than 200 startups were beneficiaries of this fund.

Ukraine has a difficult road ahead, but we hope to see the country's startup ecosystems rise stronger. Innovation can come from necessity, and Ukraine will have to capitalize on all its assets to make sure the country and its economy are rebuilt.

# Notable Startups and Ecosystem Champions

**⇒** Grammarly

Unicorn (\*

Kyiv, Ukraine

Grammarly is a digital writing assistant.

**⊃** People.ai

Unicorn 🏀

Kyiv, Ukraine

People is the AI platform for enterprise sales, marketing, and customer success that uncovers revenue opportunities.

# Ajax Systems

Kyiv, Ukraine

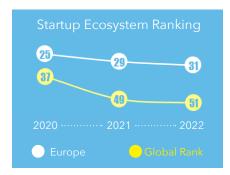
Ajax Systems manufactures smart security systems and sensors for homes.

# **Our Ecosystem Partner**





# As Budapest continues declining, Hungary lost its position in the top 50.



After decreasing in the Index for the 2nd year in a row, Hungary has dropped out of the top 50 startup ecosystems globally after regressing 2 spots to 51st. Hungary is ranked 13th in Eastern Europe.

All Hungarian startup cities have decreased in the rankings, signaling the deceleration of the development of local ecosystems.

The highest ranking city in Hungary, Budapest, is out of the global top 150 after falling 33 spots to 167th, continuing

its negative trend from last year and falling far from its position at 87th just two years ago. However, it still ranks 10th in Eastern Europe. Budapest's strong industries are Edtech, Transportation, Fintech, and Foodtech, all ranked in the Top 100.

There is still a significant gap between the capital city of Budapest and other Hungarian cities, indicating a centralized startup economy; while Budapest ranked in the top 200, all others ranked under 600th.

While the majority of startups are centered in Budapest, smaller-scale startup scenes have emerged in other parts of the country, such as Debrecen and Szeged.Ranked 2nd in Hungary, Debrecen dropped 137 spots to 616th globally.

National Rank and Change	City	Global Rank and Change	Total Score	Overperforming Industry	
1 -	Budapest	167 <sup>-33</sup>	4.809	Edtech	
2 -	Debrecen	616 <sup>-137</sup>	0.478		
3 -	Szeged	763 <sup>-108</sup>	0.307		
4 -	Pecs	921 <sup>-140</sup>	0.191		
5 -	Székesfehérvár	981 <sup>-22</sup>	0.166		



Szeged, ranked 3rd nationally, and Pecs, ranked 4th nationally, also had a significant decline of 108 and 140 spots to 763rd and 921st respectively. As the last Hungarian city ranked in the top 1000, Székesfehérvár ended at 959th place after dropping by 22 spots.

As is evident from the Index, Hungary needs to work on restoring Budapest to its original position as a regional leader while investing in the development of other local ecosystems.

# **Startup Ecosystem Overview**

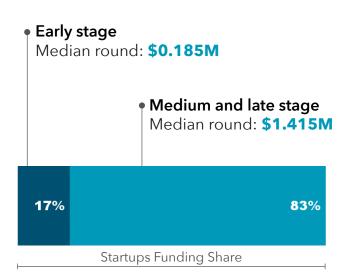
Hungary has many mature tech companies, such as well-known scale-ups Prezi, Ustream, and LogMeln. However, in recent years, the ecosystem has not been able to keep up with its previous progress toward creating a critical mass of high quality global startups. This is mainly the result of a challenging political climate and a lack of local IT talent caused by brain drain.

This will hopefully change soon, as we have seen an increase of international VC investments, as well as multiple exits including Tresorit, Makery, and Starschema. Talent-hubs and startup networks are also having an increasing impact.

Hungary's startup ecosystem has a number of advantages, including a low cost of business related overhead, a low cost of living, and easy access to the European market. Furthermore, Budapest is a popular digital nomad hub in Europe, with innovative coworking spaces and strong startup networks that attract skilled foreign entrepreneurs. However, more should be done to incentivize the integration of foreign entrepreneurs into the Budapest ecosystem, including local startup registration.

There are different organizations in both the private and public sectors that actively support the growth of the Hungarian startup ecosystems, including government-backed agency <u>Design</u> Terminal, the <u>INPUT program</u>, the <u>National Research Development and Innovation Office NKFIH</u>, <u>Startup Safari</u>, and the <u>ICT Association</u>.

Government implemented support initiatives include <u>Hiventures</u>, a government-backed VC firm which became an important player in the local VC scene. There are also several government-backed incubators and <u>JEREMIE</u> (Joint European Resources for Micro to Medium Enterprises) funds.





# Notable Startups and Ecosystem Champions

## **⇒** SEON

# Budapest, Hungary

SEON is an online fraud prevention platform that detects and stops fraud in real-time through transactional data analysis.

# Almotive

## Budapest, Hungary

Almotive is one of the largest independent teams in the world working on automated driving technologies.

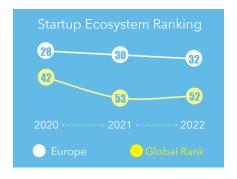
# Bitrise

# Budapest, Hungary

Bitrise is a mobile DevOps platform built to address mobile's challenges, empowering mobile teams to deliver their best work.



# Serbia moved one spot up to rank 52nd globally, adding a 3rd city to the ranking.



Serbia has moved up one spot to rank 52nd globally, and 14th in Eastern Europe. The capital and highest ranked city in Serbia, Belgrade, dropped 41 spots to rank 200th globally and 6th in the Balkans region. Belgrade has solid results in the Marketing & Sales industry, where it ranks 82nd globally.

Serbian cities continue a negative trajectory from last year, with the exception of Niš. Ranked 2nd nationally, Novi Sad dropped by 111 spots to 456th globally while Niš

managed to make a comeback at 842nd place. Although the first two cities declined, the good news is that Serbia made progress in developing other local ecosystems and again has 3 cities ranked in the top 1000. The relatively small gaps between Serbia's score and the scores of Ukraine and Hungary, ranked 12th and 13th in Eastern Europe respectively (both having negative momentum), imply that if Serbia continues its positive momentum it is well-positioned to climb up the regional ranks next year.

п	National Rank and Change	City	Global Rank and Change	Total Score	Overperforming Industry	1
	1 -	Belgrade	200 <sup>-41</sup>	4.115	Marketing & Sales	,
	2 -	Novi Sad	456 <sup>-111</sup>	0.881		
	3 new	Niš	842 <sup>new</sup>	0.242		



The Serbian IT sector is the country's most obvious economical engine of growth; many Serbs have realized that a classical economy may not be the best way to sustain themselves, and Serbia has become a freelancing hub for Western companies.

With access to the European market, Serbian startup ecosystems are strong in a number of innovative industries, including Blockchain technology. The tech sector is strongly focused on gaming and ondemand apps that help with productivity and fitness. Blockchain and gaming have both been attracting investment in record numbers, and we hope to see this trend continue into new industries.

Potential can be seen in the agricultural sector with increasing focus on developing agritech. One example is Agremo, an app utilizing artificial intelligence and machine learning to monitor crops. Supported by Google, organizations such as Startit offer entrepreneurs a stable platform for networking and linking startups in smaller cities with funding from Belgrade. Startit was launched by a group of savvy entrepreneurs who have become key players in growing the local ecosystem. We also commend the efforts of Business Incubator Novi Sad in supporting the local ecosystem, as well as initiatives such as Venture an Idea, launched cooperatively by Digital Serbia and USAID.

In order to further boost the Serbian national startup ecosystem, the public sector should focus on incentivizing foreign investment and promoting connections between Belgrade and startups in smaller cities. It remains to be seen what impact the newly adopted "Strategy for the Development of Startup Ecosystems of the Republic of Serbia" will have on the startup landscape. With such public sector support, and considering the impressive talent in the country, it is likely that any scaleups would be able to quickly transform the Serbian Economy. In the future, we hope to see Serbian startups focus more on the international markets and on making their ecosystems more recognizable on a global scale.

# Notable Startups and Ecosystem Champions

# Tenderly

Belgrade, Serbia

Tenderly is a platform that enables people to build innovative blockchain products.

#### Vladam

Novi Sad, Serbia

Vladam is an automated Al-powered cryptocurrency trading platform.

#### MobileGo

#### Belgrade, Serbia

MobileGo is a cryptocurrency aiming to bring smart contract technologies to the world of mobile gaming.

# 53 | Thailand

# After a challenging year, Bangkok remains in the top 100.



This year, Thailand lost its place in the global top 50, dropping 3 spots to 53rd. However, it maintained its position as 11th in Asia Pacific and 4th in Southeast Asia, still ahead of Vietnam.

All ranked Thai cities have decreased in the Index, with only Bangkok in the global top 100. Bangkok dropped 28 spots to 99th but is also ranked 4th in Southeast Asia, just slightly ahead of Manila. Bangkok overperforms in Ecommerce & Retail, Edtech, Transportation, and Fintech

where it ranks in the global top 100, with its best results in Transportation at 43rd globally.

Ranked 2nd nationally, Phuket has surpassed Chiang Mai, decreasing 105 spots to 547th globally. Although a digital nomad hotspot, Chiang Mai decreased in the rankings by 170 spots to 567th, mostly due to the negative effects of lockdowns and the pandemic. Pattaya, 4th nationally, dropped 31 places in the Index. There is an evident gap between Bangkok and other cities, as no other city is ranked in the top 500, which represents a challenge for the progress of the Thai startup economy. Thailand policy makers should invest in strengthening the smaller local ecosystems while reversing the momentum of Bangkok.

п	National Rank and Change	City	Global Rank and Change	Total Score	Overperforming Industry	
	1 -	Bangkok	99 -28	7.355	Transportation 🙎	
	<b>2</b> <sup>+1</sup>	Phuket	547 <sup>-105</sup>	0.607		
	<b>3</b> <sup>-1</sup>	Chiang Mai	567 <sup>-170</sup>	0.555		
	4 -	Pattaya City	864 -31	0.224		



Over the last forty years, Thailand has taken a leap forward into a more economically developed country through multiple reforms and social innovations. Mainly seen as a tourist destination, the emergence of COVID-19 caused the public sector to prioritize startup ecosystem development as an important step in securing Thailand's future economic growth.

As in other Asian countries, Thailand would benefit from a cultural shift toward making the young population less risk averse and more entrepreneurial. Thankfully, the country recently saw a surge in unicorns, with Flash Express and Ascend Money both passing US\$1 billion in valuation. Hopefully, this will stimulate the entrepreneurial spirit of the population and draw more capital into the startup scene.

Thailand attracts not only tourists, but also flocks of digital nomads residing largely in Chiang Mai and Bangkok. With creative policies, the Thai public sector could tap into this immense knowledge and talent base. The goal should be to connect local and foreign entrepreneurs in the hopes that viable projects will follow, increasing linkage to Thailand and its people. The Thai public sector has taken note of this potential and is offering a unique Elite visa for business, leisure, and profesional travels, as well as a **Smart Visa** for foreigners who have established tech startups in Thailand. In addition, Thailand's National Innovation Agency (NIA) is actively involved in attracting foreign investment by promoting strategic startup ecosystems as centers for innovation in a number of key industries.

Such programs can be attractive; Thailand's startup ecosystems provide interesting opportunities for foreign entrepreneurs and investors, and founders benefit from affordable living and operating costs. Thailand also has a strong startup network to help new entrants in the country find investment and talent.

Considering Thailand's robust economy, the country could produce more unicorns in the coming years. For this to happen, the ecosystem needs to attract more foreign investment. To this end, the Thai government has already passed tax cuts for VCs and incentivized investing in certain industries.

# Notable Startups and **Ecosystem Champions**

# ⇒ Flash Express Unicorn ←

#### Bangkok, Thailand

Flash Express is a logistics and transportation company that operates a door-to-door pickup and delivery service.

# Ascend Money

Unicorn 🍊

# Bangkok, Thailand

Ascend Money is a Fintech startup company that delivers e-payment and micro-lending products.

#### Omise

# Bangkok, Thailand

Omise is an online payments platform that enables businesses to seamlessly and securely accept payments over the Internet.gaming.



# Vietnam jumped 5 spots to rank 54th globally.



Vietnam has advanced in the Index by 5 places to 54th globally, continuing the positive momentum that started with a climb up the Index in 2020. Vietnam rose from 6th to 5th in Southeast Asia, displacing the Philippines, and is well-positioned to overtake Thailand (4th regionally) next year if this positive momentum continues.

The gap between the two only ranked Vietnamese cities has widened this year.Ranked 1st in Vietnam, Ho Chi Minh City is moving closer to the global top 100, jumping 68

spots to 111th, and showing positive momentum from last year. This rapid growth signals that good things are happening in Ho Chi Minh. On the flipside, Hanoi has decreased 31 spots to 222nd, falling out of global top 200.

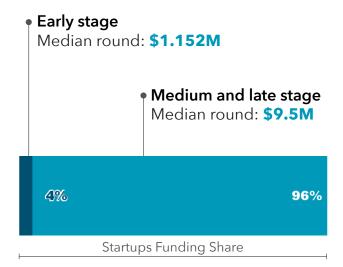
Having Hanoi and Ho Chi Minh City as innovation hubs is a massive bonus to the Vietnamese ecosystem, but hopefully more cities will follow suit. With Vietnam's population of almost 100 Million, two ranked ecosystems is certainly not enough.

п	National Rank and Change	City	Global Rank and Change	Total Score	Overperforming Industry	
	1 -	Ho Chi Minh City	111 +68	6.484		
	2 -	Hanoi	222 <sup>-31</sup>	3.675		



The Vietnamese ecosystem has massive potential, mostly due to the substantial market size of the Vietnamese economy, making the creation of successful local startups profitable even if they do not expand internationally. The large number of expats and digital nomads in Ho Chi Minh city further contributes to the growth of the local ecosystem. However, to become a true regional and global hub, Vietnam will have to generate innovations that have regional or global impact.

The Vietnamese government has established a number of funds and initiatives at different levels to support startups and promote entrepreneurship. These include the SpeedUP fund started by Ho Chi Minh City's Department of Science and Technology, the Startupcity.vn online platform, the Vietnam - Finland Innovation Partnership Program, Saigon Silicon City Center, and the National Technology Innovation Fund (NATIF) under Vietnam's Ministry of Science and Technology.



To attract foreign investors or companies to Vietnam, the government offers tax incentives.

In 2016, Vietnam approved the <u>Initiative</u> for the startup ecosystem in Vietnam until 2025, more commonly known as National Program 844, to further promote the thriving startup ecosystems in the country. Since the beginning of the program, there has been strong growth both in the number of new startups and in their revenue.

In 2018, the government approved the Law on Supporting Small and Medium-Sized Enterprises to support start-ups through technology transfer, investments, training, and incentives for venture capital funds.

The main challenges the startup community in Vietnam is facing are a shortage of qualified workers, scarcity of funding, lack of critical mass of scaled startups, and slow regulatory reforms. In addition to existing funds and loans, the government needs to invest more in training and education to build a skilled workforce.

Vietnam should also continue with regulatory reforms to build a friendly business environment for investors and developers, and to attract digital businesses to the country. The more Vietnam becomes an open society without Internet restrictions, the easier it will be for its startup ecosystem to thrive.

Growing industries that attract investors include ecommerce, fintech, foodtech, enterprise solutions, and information technology services. With unicorns such as MoMo and Sky Mavis, Vietnam is revealing itself to be a startup powerhouse in Southeast Asia.



# **Notable Startups and Ecosystem Champions**

**⇒** MoMo

Unicorn (

## Ho Chi Minh City, Vietnam

Momo is an e-wallet and payments app that allows users to make payments and transfer money digitally.

**⇒ Sky Mavis** Unicorn **(\*)** 

## Ho Chi Minh City, Vietnam

Sky Mavis is a software development company that produces games and products based on blockchain technology.

## Sendo

# Ho Chi Minh City, Vietnam

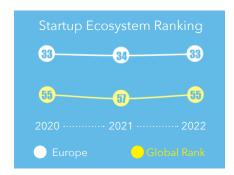
Sendo is an ecommerce site that offers clothing, homeware, cosmetics, and tech accessories.

# **Our Report Partner**





# Limassol becomes the highest ranked city in Cyprus.



Cyprus has recaptured its rank from 2020 after an increase of 2 spots to 55th globally.

There was a big change this year in the ranking of top Cyprus cities. For the first time, Limassol has become the highest ranked city in Cyprus, surpassing Nicosia. Limassol displayed an outstanding jump of 56 spots, ending at 379th, while Nicosia climbed up 12 spots to 402nd - not enough to keep first place. Having two dominant cities in the same country is more of an exception than a rule,

as most countries have a single dominant startup ecosystem. It could turn out to be very positive for Cyprus, as both cities may push each other to invest more, resulting in both becoming even stronger startup hubs in the future.

Paphos, on the other hand, decreased 255 spots to 848th, and Larnaca disappeared from the top 1000 rankings. Cyprus currently has a total of 3 cities in the global top 1000, compared to 4 last year.

Cyprus has yet to create a strong startup ecosystem that can progress into the global top 100 and should strive to make sure that the momentum of both Limassol and Nicosia continues, further developing them to carry the Cyprus ecosystem forward.

п	National Rank and Change	City	Global Rank and Change	Total Score	Overperforming Industry	1
	1 +1	Limassol	379 <sup>+56</sup>	1.331		
	<b>2</b> <sup>-1</sup>	Nicosia	402 + 12	1.191		
	3 -	Paphos	$848^{-255}$	0.235		



The island of Cyprus has built a relatively modern, free-market, service based economy. The country is a famous tourist destination, but lacks recognition for its startup activities, due largely to a lack of funding. The resulting lack of success stories affects the motivation of the local population toward entrepreneurship.

The government has been working on different initiatives to attract investors and entrepreneurs, including various tax incentives for investment and innovation, the availability of a <u>start-up visa</u>, and funding opportunities.

The <u>Cyprus Startup Visa</u> program allows talented entrepreneurs from third world countries outside the European Union (EU) and the European Economic Area (EEA) to develop a startup with high growth potential in Cyprus.

Notable initiatives to support entrepreneurs and attract foreign investors include <u>Invest Cyprus</u> and <u>ARIS</u>, a program jointly funded by Bank of Cyprus and the consulting firm Deloitte.

Cyprus has established itself as a growing fintech hub. The dynamic fintech movement includes startups offering services from real-time investment portfolio securitization and advanced performance analytics to automated order processing. Besides fintech, it is also home to some of the leading names in RegTech, IoT, cybersecurity, and the gaming industry. Cyprus has seen growth in Blockchain technology, and the University of Nicosia is the first university in the world to offer a Masters course in Digital Currency.

Cyprus has an unrealized startup potential which is now being leveraged by an increasing number of start-up accelerators, incubators, and research institutions developing innovative projects.

# Notable Startups and Ecosystem Champions

#### LearnWorlds

#### Limassol, Cyprus

LearnWorlds is a SaaS platform for creating and selling online courses.

# Genesis Digital Assets

## Limassol, Cyprus

Genesis Digital Assets is an industrial-scale bitcoin mining operator.

## BridgerPay

#### Limassol, Cyprus

BridgerPay is a Payment Operations Platform built to automate the payment flows of any business, anywhere.

# **Our Report Partner**





# Uruguay is 5th in South America.



After amazing progress in 2021, Uruguay has decreased 5 spots in the Index to 56th globally this year. Uruguay is 5th in South America and 6th in the Latin America & Caribbean region.

The capital of Montevideo is the highest and only ranked city in the country. Montevideo wasn't able to keep its positive growth from last year and has dropped out from the global top 200 after a decrease of 53 spots to 218th. Montevideo has been swinging in our rankings; This year, it dropped 53 spots; in 2021 it climbed up 110 positions,

and in 2020 it lost 130 positions. Montevideo is the 10th highest ranking startup ecosystem in South America. It also performs well in the Fintech industry, ranking 44th globally.

Uruguay should focus on bringing Montevideo back into the global top 200, as well as on developing more seed ecosystems outside of Montevideo to add resilience to the Uruguayan startup economy.

National Rank and Change	City	Global Rank and Change	Total Score	Overperforming Industry	
1 -	Montevideo	218 <sup>-53</sup>	3.696	Fintech	

For more information about the rankings of cities, view the country dashboard on Startublink.com.

# **Startup Ecosystem Overview**

Uruguay's main startup ecosystem advantage is the country's stability. Surrounded by nations facing ongoing economic and political crises, Uruguay is an island of certainty. The government supports the startup ecosystem, but local talent is scarce, and successful startups are relatively hard to find. Those who excel usually focus on AI and gaming. The National Agency for Research and Innovation (ANII) is encouraging new ideas with grants and tools for entrepreneurs. One of these tools is the future Platform for Innovation that will be launched in collaboration with Newlab, with the aim of attracting talent and promoting innovation in Uruguay.



Uruguay has to make sure its local talent stays in the country while promoting itself to foreign entrepreneurs and investors as a fertile place to scale regional and global startups. The country could also leverage its unique advantages, such as the exceptional internet connectivity, high literacy rates, a strong tech sector, and good cooperation with other countries. While it is natural in a small country for a capital city to take a lead in the national ecosystem, Uruguay would benefit from nurturing seed activities in other cities.

In addition, the public sector needs to create more opportunities for startups to acquire funding by activating private sector stakeholders while improving the country's regulatory and digital infrastructure. Additionally, improvements can be made to entrepreneurial education in both secondary education and in accelerators available to startups.

# Notable Startups and Ecosystem Champions

#### Datanomik

#### Montevideo, Uruguay

Datanomik is a platform that allows businesses to receive financial information in a simple, seamless way.

#### Data4Sales

# Montevideo, Uruguay

Data4Sales helps ecommerce stores understand their most valuable customers.

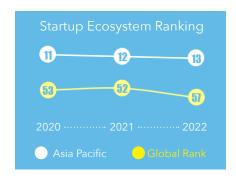
#### Nocnoc

#### Montevideo, Uruguay

Nocnoc is a tech-enabler that helps global sellers succeed in Latin America.

# 57 | The Philippines

# In spite of a negative momentum, the Philippines maintains 5 cities in the ranking.



The Philippines has decreased by 5 spots to 57th globally, and is now 6th in Southeast Asia. However, the Philippines is ranked 3rd in Southeast Asia by Quantity score, demonstrating higher startup activity compared to other countries in the region.

Manila has fallen 13 spots to 100th globally but remains the 5th best startup ecosystem in the Southeast Asia region, well ahead of its first regional contender, Ho Chi Minh City. Manila also ranks in the top 50 global

ecosystems for Hardware & IoT industry at 48th globally.

All ranked Philippine cities have decreased in the Index this year, with the exception of a new entrant to the ranking, Naga, as the only local ecosystem showing positive momentum. The 2nd highest ranked city in the Philippines, Cebu, dropped 181 spots to 449th globally. Cagayan de Oro and Davao City have also displayed a substantial fall of 215 and 173 spots to 708th and 959th globally.

The Philippines retains a total of 5 cities in the Index after the addition of Naga at 952nd and the fallout of Baguio.

п	National Rank and Change	City	Global Rank and Change	Total Score	Overperforming Industry	
	1 -	Manila Area	100 <sup>-13</sup>	7.327	Hardware & IoT 🎉	
	2 -	Cebu City	449 <sup>–181</sup>	0.915		
	3 -	Cagayan de Oro	708 <sup>-215</sup>	0.364		
	<b>4</b> new	Naga	952 <sup>new</sup>	0.177		
	<b>5</b> <sup>-1</sup>	Davao City	959 <sup>-173</sup>	0.175		



The Philippines need to work on strengthening Manilla to keep it from dropping out of the top 100, instead pushing it closer to the global top 50 startup ecosystems, as well as on developing additional local ecosystems to decrease the gap between Manilla and other cities.

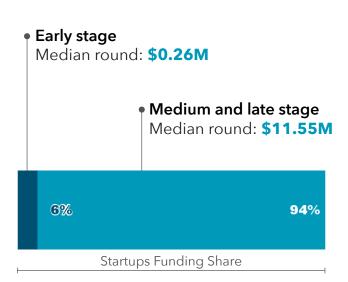
# Startup Ecosystem Overview

The Philippines is making progress toward becoming a formidable startup ecosystem in the Asia Pacific region. The country enjoys a talented English speaking population, with many already working remotely for international startups. Its attractiveness to foreign entrepreneurs and digital nomads, and the massive knowledge that local remote workers have gained while working in international startups, should allow for successful ecosystem growth, provided more of the local population embraces entrepreneurship.

The country has dozens of government programs to encourage entrepreneurs, including the <u>QBO Innovation Hub</u> and the P3 Program. <u>KMC</u>, the largest coworking chain in the country, along with several startup incubation programs, are also supporting the Philippines' startup ecosystem. The public sector is creating a regulatory framework through the <u>Innovative Startup Act</u> to empower early stage startups. Under this Act, three types of visas are set to attract entrepreneurs, investors, and startup employees.

Nevertheless, the Philippines faces several challenges that could delay the country's development into a fully mature startup ecosystem.

The lack of infrastructure is a limiting factor to the country's economic growth, and entrepreneurs struggle with slow regulatory support for their startups.



Tackling these issues is important due to common interests from both international and local venture capitalists.

# Notable Startups and Ecosystem Champions

#### Revolution Precrafted

#### Manila Area, Philippines

REVOLUTION is a collection of limited edition, precrafted properties, including homes and pavilions.

# Mynt

## Taguig, Philippines

Mynt provides financial services that include payments, remittances, loans, business solutions, and platforms.

# PayMongo

#### Manila Area, Philippines

PayMongo is a financial technology company that allows businesses in the Philippines to accept payments of all types in a matter of minutes.

#### **Our Ecosystem Partner**

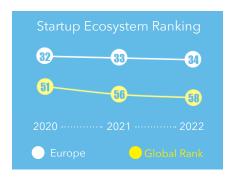
## **Our Report Partner**







# Slovakia adds a new city to the rankings.



Slovakia continues its negative trajectory, decreasing in the rankings for the 4th year in a row. Slovakia now ranks 58th globally, after falling 2 places in the Index, and 15th in Eastern Europe.

The capital, Bratislava, has been struggling with negative momentum since 2019. This year, Bratislava lost 73 spots to rank 269th globally, falling out of the top 200 startup ecosystem cities. However, Bratislava ranks 47th for Marketing & Sales.

Kosice has had a substantial loss of 119 spots to 645th, but we can congratulate new entry Trnava at 930th; Slovakia now has three cities in the global top 1000. As Bratislava is declining in the rankings, creating seed startup activity in additional cities throughout the country can help reverse this momentum in the future.

National Rank and Change	City	Global Rank and Change	Total Score	Overperforming Industry	
1 +	Bratislava	269 <sup>-73</sup>	2.564	Marketing & Sales	
2 -	Kosice	645 <sup>-119</sup>	0.445		
3 new	Trnava	930 <sup>new</sup>	0.188		

For more information about the rankings of cities, view the country dashboard on Startublink.com.

# **Startup Ecosystem Overview**

Slovakia has an enviable geographical location, allowing easy access to the startup hub of Vienna (less than 1-hour ride from Bratislava), sharing a border and language with Czechia, and adjacent to two of Eastern Europe's largest markets: Ukraine and Poland. This allows Slovakian startups to tap into several markets with high potential. Some of the emerging innovation communities involve industries like healthcare, climate resilience, fintech, digital and creative, and mobility.



Slovakia is also one of the most politically stable countries in the region. Additionally, Slovakia can provide startups with affordable and skilled tech labor.

There is a vibrant community of young entrepreneurs gathered in incubators, accelerators, and coworking places in Bratislava, as well as around major technical universities in other regional centers like Zilina and Kosice.

With an innovative startup scene and lots of investment opportunities, especially in the research and development of digital products, Slovakia's ecosystem has much growth potential.

Slovakia's startup scene is still waiting for its first unicorn, though, but there have been several inspiring early exits among Slovak tech companies, including internet portals Azet and Zoznam.

The government still has work to do in supporting individual communities with a better regulatory environment, suitable public funding policies, and better collaboration with other stakeholders. There have been positive changes made by the government through cooperation with SAPIE - Slovak Alliance for Innovation Economy; these changes focus on encouraging new startups with legislation tailored for high-growth companies, tax incentives, startup visas, and educational reform.

One of the main challenges is scaling Slovakian startups on a global level. There are several companies that succeeded globally, however, many Slovak startups are still relying on bootstrapping, and VC culture is underdeveloped. The biggest focus for Slovakia should be on strengthening Bratislava's position while helping the Kosice ecosystem establish its position as an important secondary startup ecosystem both nationally and in the region.

With a competitive location, strong digitally oriented universities, and R&D tax incentives, Slovakia is a country with high innovative and entrepreneurial potential.

# Notable Startups and Ecosystem Champions

## Photoneo

#### Bratislava, Slovakia

RPhotoneo is a leading provider of robotic vision and intelligence.

#### CloudTalk

#### Bratislava, Slovakia

CloudTalk is a remote ready call center software platform for sales and customer service teams.

# GA Drilling

#### Trnava, Slovakia

GA Drilling is developing a drilling technology called PLASMABIT that enables major advancements in geothermal energy with significant cost savings.



# Malta remains in the top 60 globally.



Malta managed to improve its ranking for the third year in a row. This small island nation, with a population of just above 500,000, is now ranked 59th globally after an increase of one spot. Malta has advanced in the global startup ecosystem Index every year since it was first introduced in 2017.

The highest ranking city in Malta, Valletta, is also the only Maltese city ranked in the global top 1000 after San Giljan's fall out. Valletta jumped 18 spots to 354th globally,

constantly growing in the Index every year since 2017. Valletta is the highest ranked island city in the population tier below 100k (more details in the chapter Top Island Cities).

National Rank and Change	City	Global Rank and Change	Total Score	Overperforming Industry	
1 -	Valletta	354 <sup>+18</sup>	1.496		

For more information about the rankings of cities, view the country dashboard on Startublink.com.

# **Startup Ecosystem Overview**

Situated in the middle of the Mediterranean sea, the Island of Malta is one of the smallest countries in the world, as well as one of the most densely populated. This cultural melting pot of a country has a talented workforce and bilingual population. For Malta to build a substantial startup ecosystem, it must encourage its local population to build more startups and continue implementing policies that attract foreign investors and entrepreneurs.

Because Malta is also a popular tourist destination, the Covid-19 pandemic had a significant impact on the Maltese economy. However, in spite of this setback, many innovative startups are still going strong and continuing to thrive, bringing more jobs to the island. One of the reasons why the Maltese startup ecosystem is experiencing good momentum is due to government regulations aimed at attracting startups from specific sectors.



Building on a strong iGaming sector and firm foundations that include tourism, manufacturing, and financial services, Malta's economy is diversifying into Artificial Intelligence (AI), Big Data, the Internet of Things (IoT), and Distributed Ledger Technology (DLT), niche sectors in which Malta could position itself as a world leader. The aviation industry is taking off as well, with the Unmanned Aerial Vehicle (UAV) industry shaping into an exciting new sector. Malta is also targeting the budding Medical Cannabis sector with its favorable sunny climate.

Investment and support programs include <u>Startup Malta</u>, the Malta Individual Investor Program (IIP), <u>TAKEOFF</u>, <u>Malta Enterprise</u>, <u>Silicon Valletta</u>, and the governmental initiative <u>Start in Malta</u>.

If Malta leverages its ability to make quick and creative steps toward building its startup ecosystem, and continues thinking outside the box, it will continue its trajectory of growth.

# Notable Startups and Ecosystem Champions

#### Chiliz

#### Sliema, Malta

Chiliz powers the Socios.com fan engagement platform built on the Chiliz blockchain infrastructure.

#### **⇒** FRVR

## Saint Paul's Bay, Malta

FRVR builds the ecosystem that brings captivating games to billions of players instantly.

# Singular

## Sliema, Malta

Singular is a software company that develops an iGaming platform.

# **Our Ecosystem Partner**



# 60 | Armenia

# Yerevan's success pushes Armenia up 5 spots to rank 60th.



It has been a good year for Armenia which has seen a significant improvement by moving 5 spots up to be ranked at 60th globally, and reversing last year's negative momentum. It continues to be 1st in the Caucasus region, with more than double the total score of Georgia, the 2nd in the region, suggesting Armenia will continue to hold this position in the near future.

With Yerevan as Armenia's only ranked city, the country's ranking depends greatly on its capital city. In 2022,

Yerevan entered the top 250 city ranking globally. Yerevan has seen a major jump, improving by 38 spots to 244th globally, and reversing its declining momentum from 2021. This increase pushed Yerevan up the ladder in Eastern Europe, where it is now ranked 19th, versus 29th in 2021. Yerevan is the highest ranking city in the Caucasus region, with a safe margin. Its score is more than double Tbilisi's score, and more than triple Baku's score.

National Rank and Change	City	Global Rank and Change	Total Score	Overperforming Industry	
1 -	Yerevan	244 <sup>+38</sup>	3.071		

For more information about the rankings of cities, view the country dashboard on Startublink.com.

# **Startup Ecosystem Overview**

As a landlocked country with restricted land access due to tensions with Turkey and Azerbaijan, the Armenian ecosystem manages to show true resilience. The Armenian government has long understood innovation is critical to the future of the country, and resources have been allocated to grow the ecosystem. In 2021, the tech sector in Armenia flourished, with new investments fueling growth. The country's first unicorn, PicsArt, recently reached a US\$1 billion valuation. Moreover, the Armenian startup scene has seen growth in terms of entrepreneurship and tech development, with companies like Shadowmatic and YerevaNN receiving praise for designing deep learning technologies.

A strong and successful Armenian diaspora is also supporting the Armenian economy, and several highly successful American entrepreneurs of Armenian origin, like Reddit founder Alexis Ohanian,, are working to boost the local startup ecosystem.

Armenian startups are built to target the global market from inception due to the small market size of the country. Armenia has a population of only 3 million people, but offers a sizable amount of tech talent. Additionally, the Armenian government does a great job of supporting tech startups, including tax incentives. To support foreign investment, Armenia established Free Economic Zones and full ownership among other incentives under the legal framework On Foreign **Investments**. During the past few years, Armenia made significant progress in reducing bureaucracy and corruption. While the Armenian startup ecosystems are still in their early stages and the country has work to do to recover from its turbulent past, there is substantial untapped potential waiting to come to the surface.

# Notable Startups and **Ecosystem Champions**

⇒ PicsArt Unicorn



### Yerevan, Armenia

Picsart is an all-in-one photo and video editing app, powered by a creative community of monthly active users and influencers.

### SoloLearn

#### Yerevan, Armenia

SoloLearn is a community learning platform where students can learn, create, and share programming content with peers around the globe.

# Zangi

#### Yerevan, Armenia

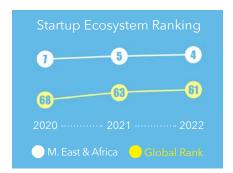
Zangi is a free encrypted messaging, voice, and video calling app.

# **Our Report Partner**



# 61 | Nigeria

# Lagos is the first African city in the top 100 city ranking.



Nigeria had a fantastic year, climbing two spots to rank 61st globally. It is the highest ranking country in Western Africa and the 2nd highest ranking country in Africa, displacing Kenya which dropped to 3rd in Africa. Nigeria ranks 4th in the Middle East & Africa region.

Nigeria's climb is the result of Lagos' success. Lagos has seen a massive jump of 41 places to 81st globally. It is the first African city to break into the global top 100, a milestone that should be celebrated (we should

mention that Lagos already ranked 99th in 2019 but lost this position in 2020). This shows the immense potential of the ecosystem in Lagos. Lagos is ranked 24th globally in the Foodtech industry and 43rd in Ecommerce & Retail. Lagos' achievement in Foodtech should be celebrated, because Lagos is the only African city to reach the global top 30 for any of the 11 industries.

Abuja has decreased by 7 spots to rank 473rd, but has captured 2nd position in Nigeria from Ibadan, which lost 308 spots to rank 661st.

Several other Nigerian seed ecosystems dropped out of the rankings this year. Consequently, the total number of Nigerian cities in the global top 1000 fell from 7 to 3, signaling some cities with seed ecosystems are losing momentum even as Lagos witnesses very high growth, and suggesting that Nigerian talent may be moving to Lagos at the expense of other cities. South Africa has displaced Nigeria as the country in Africa with the highest number of ranked cities in the top 1000.

National Rank and Change	City	Global Rank and Change	Total Score	Overperforming Industry	
1 -	Lagos	81 <sup>+41</sup>	8.378	Foodtech	
<b>2</b> <sup>+1</sup>	Abuja	473 <sup>-7</sup>	0.807		
<b>3</b> <sup>-1</sup>	Ibadan	661 <sup>-308</sup>	0.424		

For more information about the rankings of cities, view the country dashboard on Startupblink.com.



Our recommendation for policy makers in Nigeria is to strengthen other ecosystems, given the size of the country, and push one more ecosystem towards the top 200.

# Startup Ecosystem Overview

With a massive consumer market, Nigeria and its capital Lagos have become one of the largest startup hubs in Africa. The country now tops the unicorns charts with companies such as Flutterwave and OPay.

The public sector is catching on to the massive potential of startups to transform Nigeria's economy, and as the Nigeria Startup Bill is being discussed, there is hope that the country will finally have a clear legal framework for developing its ecosystems. Other initiatives, such as the **Startup Nigeria** incubator or the Co-Creation Hub, will hopefully continue to foster the entrepreneurial spirit in the country. Nevertheless, Nigeria faces some major challenges, including a shortage of financing options and poor broadband internet infrastructure. As Nigeria is attracting international recognition with its success stories, we are certain that investment levels will increase. In the meantime, the government will have to do its part to address the infrastructure deficit to allow its talented entrepreneurs to achieve success faster.

# **Our Report Partners**





# Notable Startups and Ecosystem Champions

**⇒ Flutterwave** Unicorn **(€**)

# Lagos, Nigeria

Flutterwave is a fintech company providing payment infrastructure for global merchants and payment service providers across the African continent.

**⇒ OPay** Unicorn **(€** 

### Ikeja, Nigeria

OPay enables users to accomplish more with their money by providing smart financial services.

#### CredPal

### Lagos, Nigeria

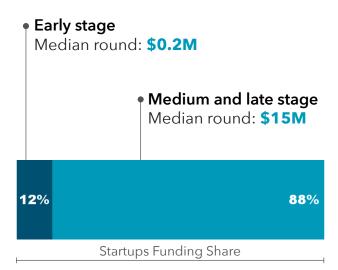
Credpal allows consumers to buy anything across various online and offline merchants, and pay for it in installments.

# **Pantheons**

## Jumia Group

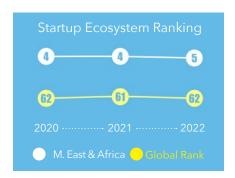
#### Lagos, Nigeria

Jumia is a consumer goods e-commerce retail platform.





# Overtaken by Nigeria, Kenya now ranks 3rd in Africa.



Kenya decreased one spot this year to rank 62nd globally, Making it the best ranked country in Eastern Africa and 3rd in Africa, where it lost 2nd position to Nigeria. The gap between the total score of the two countries is small, suggesting Kenya has an opportunity to reclaim the 2nd spot in Africa next year. It is interesting to note that Kenya has a higher Quantity score and Business score than Nigeria, but has a lower Quality score, resulting in a lower overall rank. Kenya ranks 5th in the Middle East & Africa region.

The city of Nairobi is out of the global top 150, and has decreased 27 spots to 163rd, but still ranks 1st in Eastern Africa. Nairobi, which ranked 1st in Africa in 2020, has lost 3 positions to rank 5th in Africa, now preceded not only by Lagos, but also by Capetown, Johannesburg, and Cairo. Nairobi is ranked 37th in Fintech, 71st in the Energy & Environment industry, and 80th in Foodtech. Mombasa is the only other city from Kenya ranked in the global top 1000 with a seed ecosystem ranked at 891st, significantly lower than Nairobi. After joining the top 1000 for the first time in 2021 at 756th, Mombasa has gone down by 135 spots to rank 891st. Kenya needs to reverse the decreasing trend of its ecosystems in order to reclaim its 2nd position in Africa.

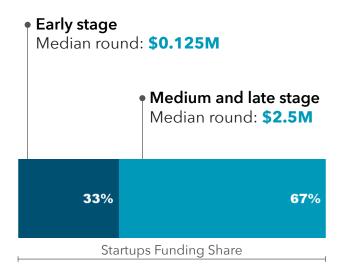
п	National Rank and Change	City	Global Rank and Change	Total Score	Overperforming Industry	1
	1 -	Nairobi	163 <sup>-27</sup>	4.820	Energy & Environment	
	2 -	Mombasa	891 <sup>-135</sup>	0.205		

For more information about the rankings of cities, view the country dashboard on Startupblink.com.

# **Startup Ecosystem Overview**

One of the most advanced economies in Africa, Kenya has become an innovative tech hub, especially for mobile payment solutions. A popular pioneering initiative in Africa's fintech industry is the launch of M-pesa, a mobile banking solution that allows people to send and receive money through their phone.





With access to a mature economy and a growing culture of entrepreneurship, Kenya offers a strong English speaking point of access to the African market.

In terms of attracting funding for startups, Kenya, along with Nigeria, Egypt, and South Africa, are the top destinations for Africa's investors. In 2021, the number of tech startups raising funds in Kenya was on the rise, with several startups securing solid investments. Tushop, for example, received \$3 million in pre-seed funding, while Wasoko, a tech startup, is set to become Kenya's first unicorn.

Kenya's public sector has been involved in startup ecosystem development since the 2013 launch of Konza Technopolis, a tech hub built outside of Nairobi. The new Startup Bill 2020 was introduced, and if passed will establish a new framework for entrepreneurship in Kenya.

Nairobi is home to global tech giants like Google, Microsoft, Samsung, and Intel, which makes the city more attractive to tech startups. Moreover, the presence of accelerators like Antler and Pangea Accelerator contributes to the startup culture.

Unlike Nigeria, Kenya - with a population of just over 50 million - will not be able

to create a critical mass of unicorns from within its local market.

The key to becoming a regional hub will be by continuing to focus on regional and global scalable startups.

# Notable Startups and Ecosystem Champions

# Twiga Foods

#### Nairobi, Kenya

Twiga Foods is a business-to-business marketplace platform that sources produce directly from farmers and delivers it to urban retailers.

# Lori System

## Nairobi, Kenya

Lori is building cutting-edge logistics infrastructure for trucking.

# Apollo Agriculture

#### Nairobi, Kenya

Apollo Agriculture is an agtech company that helps small-scale farmers access markets, financing, and inputs.

## **Pantheons**

### M-Pesa

#### Nairobi, Kenya

M-Pesa is a mobile phone-based money transfer service.

## **Our Ecosystem Partner**



# **Our Report Partner**





# Peru has maintained the 7th rank in Latin America.



This year, Peru decreased by one spot to rank 63rd globally, and 7th in Latin America.

The capital city, Lima, dropped out of the global top 150 and ranks 178th after a significant 40 spot decrease, but remains Peru's only ranked city. Peru's ranking greatly depends on its capital Lima, which is the 6th highest ranked South American city and is now the 8th highest ranked startup ecosystem in Latin America after downgrading 2 spots.

The gaps in scores among the cities ranked 170-190 are small, suggesting that reversing Lima's declining trend is feasible, yet there is also risk of further slippage. Peruvian ecosystem developers should focus on supporting the seed activity of additional startup ecosystems in the country while trying to get Lima to close gaps with other leading cities in the region.

National Rank and Change	City	Global Rank and Change	Total Score	Overperforming Industry	
1 -	Lima	178 <sup>-40</sup>	4.563		

For more information about the rankings of cities, view the country dashboard on Startupblink.com.

# Startup Ecosystem Overview

Although Peru is an early stage startup ecosystem, the founders of Peruvian startups are proudly creating companies with regional scope. Local startup potential is evidenced by the investments received from top accelerators, including Y Combinator.

Additionally, international startups can use Peru, which offers affordable operating costs, as a foothold into the South American market. The ease of doing business in Peru is improving, and so are the favorable laws for investing in the country. While there is still no startup visa, the country is welcoming to foreign talent and offers both an Investor Visa and a Freelance Visa.



Startup founders have room to innovate and scale up with relatively low competition, and the country has solid relationships not only within Latin America, but also with the EU, Canada, and China. On the other hand, since Peruvian startup ecosystems are still developing, the country lacks entrepreneurs experienced in scaling startups; once this changes, the ecosystem will grow.

The country has come a long way in improving its infrastructure but there is still room for reform, legislation, and improvements in executing policy. The government realizes that startups are critical for the future, and initiatives like StartUp Perú and ProInnóvate offer support to local entrepreneurs. In addition, the Peruvian Seed and Venture Capital Association (PECAP) promotes venture capital investment in the country from both local and foreign sources. This type of initiative is what Peru needs to attract global visibility and grow.

Peru is still lagging behind leading Latin American countries in terms of innovation and growth, but the public sector is now starting to implement policies that will help narrow this gap.

# Notable Startups and Ecosystem Champions

## Crehana

#### Lima, Peru

Crehana is a learning technology platform for companies and individuals focusing on reskilling and upskilling.

### Kambista

### Lima, Peru

Kambista is a virtual platform in Peru that facilitates changing dollars online.

# Keynua

#### Lima, Peru

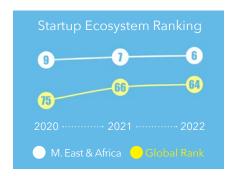
Keynua is a provider of e-signatures used for identity verification and validating transactions.

## **Our Report Partner**



# 64 | Bahrain

# Bahrain ranks 3rd in the Middle East, as Manama continues its march upwards.



Bahrain has slightly improved its position by two spots to rank 64th, improved its position in the Middle East by taking 3rd regionally, pushing past Jordan. Bahrain now ranks 6th in the Middle East & Africa region. Manama is Bahrain's only ranked city, and has seen a jump of 8 spots to 329th globally. This improvement also positioned Manama as the 10th highest ranked city in the Middle East, surpassing Jeddah. Since our very first global startup ecosystem Index in 2017, Manama has improved its ranking each year. We commend it for this consistent positive growth.

National Rank and Change	City	Global Rank and Change	Total Score	Overperforming Industry	п
1	Manama	329 <sup>+8</sup>	1.673		

For more information about the rankings of cities, view the country dashboard on Startupblink.com.

# **Startup Ecosystem Overview**

Joining the rising innovation wave in the Gulf region, Bahrain offers a favorable legal framework and various support systems for startups and entrepreneurs. Compared to other countries in the region, Bahrain has lower taxes and lower operational costs for startups. Bahrain also created initiatives like StartUp Bahrain, Tamkeen, and Bahrain FinTech Bay, which demonstrate the public sector's active involvement in the startup scene.

Bahrain is a diverse and multicultural society, as more than half of the population consists of expats. As a result, English is widely spoken and foreign influences have made the country unique and attractive to entrepreneurship. While much of the Bahrain economy is still based on the oil and gas industry, the country has managed to design ecosystems to help incubate startups and offer business support at early stages.



# Notable Startups and Ecosystem Champions

# **⇒** Calo

#### Seef, Bahrain

Calo is a D2C (direct-to-consumer) foodtech startup that serves personalized meal subscriptions.

# **⇒** WafiApps.com

#### Manama, Bahrain

WafiApps.com is an online multivendor Marketplace.

# **⇒** GetBaqala Inc.

## Manama, Bahrain

GetBaqala Inc. is harnessing the power of social networks and influencers to reinvent the supply chain and scale the power of SME retail.

# **Our Ecosystem Partner**





Please refer to the ecosystem case study section to read <u>a detailed analysis of Manama's startup ecosystem</u>.



# Egypt has jumped 5 spots this year in the ranking.



Continuing its upward trend from 2021, Egypt jumped 5 spots to 65th globally in 2022. Egypt has improved its position in Africa by 1 spot, to 4th, and with a comfortable lead from Mauritius at 5th. Egypt remains the highest ranked country in the North Africa region and climbed to 7th place in the Middle East & Africa region.

The only ranked city in the top 1000, Egypt's capital of Cairo, has seen a jump of 20 spots to rank 160th globally and 4th in Africa, with a slight lead over Nairobi (5th) and a

small gap from Johannesburg (3rd).

Alexandria dropped out of the global top 1000 this year, leaving Cairo as the only ranked city in Egypt. Cairo is ranked 89th in the Transportation industry.

The big question for Egypt is whether the country can continue to show good results, allowing it to aim at the 2nd or 3rd regional position, displacing Nigeria or Kenya.

National Rank and Change	City	Global Rank and Change	Total Score	Overperforming Industry	
1 -	Cairo	160 <sup>+20</sup>	4.900	Transportation 🙎	

For more information about the rankings of cities, view the country dashboard on Startupblink.com.

# Startup Ecosystem Overview

Egypt's startup ecosystem is one of the strongest in North Africa and displays great potential, especially in Cairo and Alexandria, given the sheer size of the Egyptian market. Egypt also offers entrepreneurs access to skilled and affordable talent.

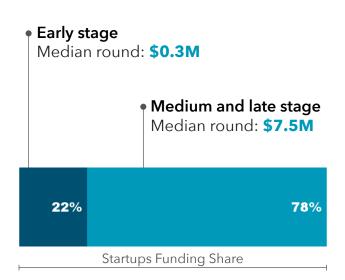
Entrepreneurship, VC funding, and startup related policies have been increasing in recent years, making Egypt an attractive country for investment. Tech incubators and global accelerators have had a positive effect, resulting in the rise of the tech sector and, most notably, ecommerce startups. As more funding poured into the ecosystem in 2021, Fawry, an e-payment startup, became Egypt's first unicorn.



The country has several VC firms and government support initiatives offering funding to startups, including Fekratek Sherkatek, which assists Egyptian youth and entrepreneurs. Nclude, a new fund for fintech supported by Egypt's largest banks and Global Ventures will provide an additional influx of investment in the country's tech sector.

The Egyptian startup ecosystem can extend its success by encouraging an entrepreneurial mindset and with regulatory improvement. The high rate of startups who participated in accelerator or incubators programs is increasing, and it's encouraging to see the public sector supporting this through initiatives such as **TIEC**. While entrepreneurship is on the rise, the market is still male-dominated, and will need more female startup founders. As far as challenges go, the Egyptian public sector should continue removing bureaucracy and red tape, and enact reforms to allow for the growth of the local startup ecosystem.

Egypt has long had a strong business culture, and we are seeing this reflected in the startup scene. The recent improvement in internet quality should also be commended, as critical infrastructure is continuing to be deployed in the country. The Egyptian ecosystem is a clear economic engine for this leading African nation, and we hope to see more innovative startups emerge from Egypt.



# Notable Startups and Ecosystem Champions

Fawry

# Cairo, Egypt

Fawry is the leading digital transformation and e-payment platform in Egypt, offering financial services to consumers and businesses.

Unicorn 🍊

#### Khazna

#### Cairo, Egypt

A Financial Super App that offers easy to use, technology-driven financial services to Egypt's underserved consumers and micro-businesses.

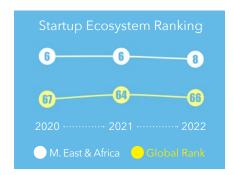
#### MaxAB

## Cairo, Egypt

MaxAB is a B2B ecommerce platform that connects food and grocery retailers to suppliers.



# Jordan is ranked 4th in the Middle East.



Jordan decreased 2 spots to rank 66th globally and 4th in the Middle East, losing the 3rd position to Bahrain. Jordan is 8th in the Middle East & Africa region, having dropped two spots after Bahrain and Egypt rose in the ranks.

Jordan's capital Amman lost 49 positions to 250th globally. It is ranked 6th in the Middle East, climbing up one position regionally, at the expense of Riyadh, which experienced an even steeper drop. The gaps in scores among cities ranked in the range 245-255 are very small,

and changes can easily occur next year.

Amman is the only ranked city in Jordan. For Jordan to advance in the rankings, we recommend stimulating more startup activity in Amman and outside it, with the goal of having another city join Amman in the top 1000.

п	National Rank and Change	City	Global Rank and Change	Total Score	Overperforming Industry	п
	1 -	Amman	250 <sup>-49</sup>	2.958		

For more information about the rankings of cities, view the country dashboard on Startupblink.com.

# Startup Ecosystem Overview

Jordan prides itself on a high level of entrepreneurial activity. The country has nurtured several successful startups, such as Arabia Weather, Abjjad, and the promising enterprises of MonoJo, Mawdoo3, and Tamatem. These successes are in part due to multiple incubators, accelerators, and investment programs available.

For instance, Jordan is home to Oasis500, Innovative Jordan, and the Innovative Startups Fund Project from the World Bank, all working to facilitate startup and small business registration processes, celebrate local innovators, and encourage Arab and foreign investors to pour capital into Jordan's startup ecosystem.



Moreover, organizations like <u>Accelerate</u> <u>Jordan</u> are working to create more opportunities for startups by building entrepreneurial networks and developing innovation hubs like the Wadi Araba innovation valley. The country is also enjoying the presence of a talented team from <u>Response Innovation Labs</u> and their ongoing support of local entrepreneurs.

Despite this massive startup support network, entrepreneurs are discouraged by high tax rates and investment barriers. However, the public sector has been active in reducing the red tape and has pushed through laws to promote investment.

The political stability, abundance of human resources, and strategic location are great assets for Jordan. The country's main challenge will be to make its most ambitious and talented entrepreneurs stay and develop their startups in Jordan. With the active support of the government, the startup scene can flourish in the coming years and produce more success stories.

# Notable Startups and Ecosystem Champions

#### Qalam.ai

Amman, Jordan

Qalam is an Arabic writing digital assistant for users.

## **⇒** Xina AI

Amman, Jordan

Xina is an Arabic Interactive Voice Assistant (IVA) and Chatbot.

# Jo Academy

Amman, Jordan

Jo Academy is an e-learning educational platform.

# 67 | Costa Rica

# Costa Rica has improved its ranking by 5 spots.



Costa Rica is on a good path. After joining the Index last year, the country rose further up the Index by 5 spots to rank 67th globally. It has maintained its ranks of 8th in Latin America and 2nd in Central America.

San José, Costa Rica's only ranked city, has seen an improvement of 34 spots to rank 299th globally, advancing its rank for the 3rd year in a row. San José is the 5th highest ranking city in the Mexico & Central America region, and the highest ranking city in Central America.

National Rank and Change	City	Global Rank and Change	Total Score	Overperforming Industry	
1 -	San José	299 <sup>+34</sup>	2.043		

For more information about the rankings of cities, view the country dashboard on Startupblink.com.

# **Startup Ecosystem Overview**

Costa Rica has been a digital nomad and expat hotspot for years due to its relatively low cost of living. In addition, this beautiful country offers a high standard of living as well as a mostly bilingual local population that embraces foreigners, thanks to a historically strong tourist industry.

Costa Rica has a strong connection to the United States, its largest trading partner. The country's stable political climate makes its startup scene attractive for foreign investment and partnerships. Costa Rica invests heavily in educating its population and in training its talented tech workforce. As a result, the country built a vibrant technology hub. The public sector supported this by putting forward new legislation and strategies that would create a favorable climate for the digital economy. However, there is work to be done in terms of funding and government support for early stage startups as well as in promoting the Costa Rica startup scene globally. We look forward to more initiatives, such as the Green Tech program (established by <a href="Procomer">Procomer</a>) to activate and support innovation in Costa Rica.



# Notable Startups and Ecosystem Champions

# Decentral Games

## San José, Costa Rica

Decentral Games is a next generation entertainment platform at the intersection of metaverse and blockchain technology.

# Zunify

# Escazu, Costa Rica

Zunify a payment network that provides a unified and fair financial system.

# ClearLeaf

# San Pedro, Costa Rica

ClearLeaf uses patent-pending technology, organic certified in the EU and Japan, to control fungi and bacteria in agriculture.

# 68 | Liechtenstein

# Liechtenstein remains stable.



The small nation of Liechtenstein has maintained its position from last year at 68th globally. The country ranks 37th among the 46 ranked countries in Europe. The city of Vaduz is Liechtenstein's only ranked ecosystem, And after two years of climbing in rank, Vaduz lost 23 spots this year and dropped to 483rd.

п	National Rank and Change	City	Global Rank and Change	Total Score	Overperforming Industry	п
	1 -	Vaduz	483 -23	0.782		

For more information about the rankings of cities, view the country dashboard on Startupblink.com.

# **Startup Ecosystem Overview**

Liechtenstein is a small German speaking country landlocked between Switzerland and Austria. According to UN data, Liechtenstein has a population of just under 40,000 people, 67% of which are foreign nationals. Considering the small size of Liechtenstein, the country offers entrepreneurs access to a highly digitized society with active government involvement. The country's location also helps startups access the EU market without needing to be located in a big city.

The combination of strong industry, an established international financial center, market access to the EEA and Switzerland, progressive legislation, and solid innovation framework creates a stable foundation for ecosystem growth.

Liechtenstein's characteristics and government policy has made it an attractive business location for fintech and blockchain companies over recent years, resulting in heavy ecosystem development around these industries.



Liechtenstein provides founders with an easy way to set up new businesses and acquire government assistance. The Technopark in Liechtenstein specializes in promoting fintech startups and creates a powerful network for founders. A major challenge for founders looking to establish a startup in Liechtenstein is the cost of living, however commuting from nearby Switzerland, Austria, or Germany is possible.

# Notable Startups and Ecosystem Champions

#### 21Finance

## Ruggell, Liechtenstein

21Finance delivers white-label MaaS and BaaS solutions that help clients scale and streamline their traditional and tokenized offerings.

## Celestia

Vaduz, Liechtenstein

Celestia is a blockchain distributed ledger.

#### **⇒** DSTOQ

Vaduz, Liechtenstein

DSTOQ makes investing accessible and affordable for people in emerging markets.

# **Our Ecosystem Partner**



# 69 | North Macedonia

# North Macedonia has had a difficult year, falling 11 spots.



One of the smaller nations in our Index, North Macedonia has experienced a substantial decline of 11 spots to 69th globally, reversing last year's positive momentum.

Skopje is the highest and only ranked city in North Macedonia, decreasing 179 spots to 459th and falling out of the global top 300. It has also dropped from the Balkans top 10, ranking 11th in the region, with a very small gap between Novi Sad (10th regionally) and Tirana (12th).

National Rank and Change	City	Global Rank and Change	Total Score	Overperforming Industry	п
1 -	Skopje	459 <sup>-179</sup>	0.871		

For more information about the rankings of cities, view the country dashboard on Startupblink.com.

# **Startup Ecosystem Overview**

The entrepreneurial ecosystem in North Macedonia has shown progress in the last five years, mainly driven by three forces: entrepreneurs, Startup Macedonia, and the Fund for Innovation and Technology Development (FITD). The majority of startups in North Macedonia receive seed and early-stage funding through the statesponsored FITD, yet North Macedonian VCs have faced challenges in spotting high-potential startups that have already reached the validation phase.

The ICT sector in North Macedonia is active, with many talented workers also contracting remotely for global companies. The main challenge of the country is brain drain; many of the most talented North Macedonians are leaving the country in search of better opportunities elsewhere. To avoid this, the government and international development organizations should do more to allocate more resources for the local tech ecosystem and make sure those resources are easily accessible to local entrepreneurs.



North Macedonia's government has shown positive initiative by approving the 2022-2026 Accelerated Economic Growth Plan, which includes a hybrid investment fund that will focus on startups and innovative companies. The new investment fund is also supported by the World Bank, and is expected to start investing in the second half of 2022.

The public sector is working on initiatives to promote the ecosystem to foreign entrepreneurs through special tax incentives in an attempt to position the country as a powerful startup hub in the region. Moreover, North Macedonian ecosystems are actively being developed both by startup enthusiasts and Startup Macedonia, a grassroots umbrella association connecting the North Macedonian startup community with a data-driven approach to help create a favorable work environment for startups and scale ups in North Macedonia.

With Skopje being one of the most cost effective tech hubs in the Balkans, a highly skilled Macedonian talent pool, and remarkable startup enthusiasm, North Macedonia has a lot of potential to grow.

# Notable Startups and Ecosystem Champions

# EmbedSocial

Skopje, North Macedonia

EmbedSocial builds social media tools to help marketers.

#### Howitzer

Skopje, North Macedonia

Howitzer is a marketing tool for entrepreneurs, startups, and growth hackers.

#### Microtica

Skopje, North Macedonia

Microtica is a modern platform for developer selfservice.

# **Our Report Partner**





# Belarus slipped 3 spots to rank at 70th.



Belarus slipped 3 spots this year to rank 70th, and kept its rank of 18th in Eastern Europe. As the only ranked city in Belarus, Minsk has seen a dramatic fall of 82 spots to 312th globally. Within Eastern Europe, Minsk ranks 24th, a decline of two positions since 2021.

Since we introduced our global startup ecosystem Index in 2017, Belarus and Minsk have been decreasing in ranks every year, making it an ecosystem of vast but unfulfilled potential.

п	National Rank and Change	City	Global Rank and Change	Total Score	Overperforming Industry	
	1 -	Minsk	312 <sup>-82</sup>	1.868		

For more information about the rankings of cities, view the country dashboard on Startupblink.com.

# **Startup Ecosystem Overview**

Belarus used to be an example of a country that is relatively isolated but still manages to leave a positive mark on the global startup ecosystem, largely due to the extraordinary quality of local developers, IT professionals, smart ecosystem development policies. This is now a thing of the past. Recent years have brought political instability and further international isolation which creates extremely difficult conditions for local entrepreneurs. As a result, Belarus now has a massive gap between its true potential and current performance, intensified with an exodus of its most talented IT people to other countries in

Europe that are happy to receive them. It will take years for local ecosystems to recover and convince talented workers to return home.

Belarus has a difficult task ahead in order to grow its startup ecosystems. First, the country will need to regain the trust and investment from foreign VCs, which is unlikely under current conditions. Second, new policies will be needed to help entrepreneurs keep their headquarters in Belarus and view the country as a potential market. The future of the local startup ecosystem and its viability as an economic engine greatly depends on how the country's geo-political situation evolves.



# Notable Startups and Ecosystem Champions

# RocketData

## Minsk, Belarus

RocketData enables users to take control of their online-brand and turn web traffic into foot traffic.

# Amasty

# Minsk, Belarus

Amasty enables businesses worldwide to develop e-commerce tools.

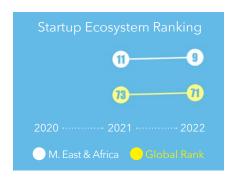
## **⇒** Verv

## Minsk, Belarus

Verv helps people maintain healthier lifestyles by providing them with a holistic approach to well-being.

# 71 | Mauritius

# 2 new cities from Mauritius entered the top 1000 city rankings.



Mauritius, which entered the Index last year, has improved by 2 positions to rank 71st globally. Regionally, it is ranked 5th in Africa after improving its position by 1, with a large gap in score from the next highest ranked Morocco. Mauritius ranks 9th in the Middle East & Africa region, an improvement of 2 spots since 2021.

Last year, Mauritius entered the Index as the only country with no cities ranked in the global top 1000. Our sampled startups were divided across 3 different locations, and

none had enough critical mass to participate in the rankings. This year, however, two of these cities have made a debut in the city Index: Port Louis ranked 559th and Grand Baie ranked 986th.

п	National Rank and Change	City	Global Rank and Change	Total Score	Overperforming Industry	1
	1 new	Port Louis	559 <sup>new</sup>	0.575		
	2 new	Grand Baie	986 <sup>new</sup>	0.165		

For more information about the rankings of cities, view the country dashboard on Startupblink.com.

# **Startup Ecosystem Overview**

Mauritius is an island nation in the Indian Ocean with a population of just over 1 million. With a small but healthy startup ecosystem, thanks to a tight knit community of freelancers and entrepreneurs, the country also has a relatively developed physical infrastructure that serves as a solid foundation for new businesses.

Both the public and private sector are invested in the health and development of Mauritius' startup ecosystem, facilitating funding, competitions, and networking events for entrepreneurs. The country is considered a tax haven for offshore investing and has a number of Double Taxation Avoidance Agreements and Investment Promotion and Protection Agreements (IPPAs).



Moreover, the country developed an Occupation Permit that is available not only to investors, but also to freelancers or startup founders.

Additionally, Mauritius has a number of incubators and accelerators that help support early stage startups.

For Mauritius to become more competitive among Africa's startup hubs, the country will need to leverage its ICT sector to better harbor innovation with global impact. Considering the country's small population, attracting and keeping talent inside its startup ecosystems could be a challenge. Mauritius' 10 - Year Master Plan For The SME Sector indicates that the public sector is aware of all these challenges and has set in place strategies to overcome them.

# Notable Startups and Ecosystem Champions

# **⇒** 4G Capital

#### Grand Baie, Mauritius

4G Capital is providing financial literacy training with working capital loans to help small businesses grow sustainably.

#### Zindi

#### Ebène, Mauritius

Zindi is a data science marketplace where the supply and demand for AI solutions and talent can connect.

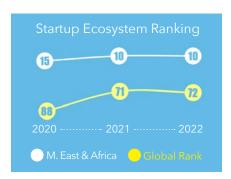
# AgroCenta

#### Port Louis, Mauritius

AgroCenta is an agricultural technology platform creating shared value for smallholder farmers and businesses

# 72 | Saudi Arabia

# Saudi Arabia has lost one spot in the rankings.



Saudi Arabia lost one spot to rank 72nd globally, maintaining 5th position in the Middle East and 10th in the Middle East & Africa region. Riyadh, the highest ranked city in Saudi Arabia, fell 62 spots to 254th, dropping from the world's top 200 club.

With 4 cities in the top 1000, Saudi Arabia is 2nd in the Middle East after Israel when it comes to the number of cities ranked. This suggests it has more startup hubs than higher ranked countries in the region.

Saudi Arabia's 2nd ranked city, Jeddah, has a rank of 385th after losing 91 spots. Dammam is a new entrant to the city Index at 563rd. Mecca has lost 282 spots, now ranking at 977th, and Medina dropped out of the top 1000, which means the Kingdom's total number of ranked cities remained unchanged.

ı	National Rank and Change	City	Global Rank and Change	Total Score	Overperforming Industry	
	1 -	Riyadh	$254^{-62}$	2.916		
	2 -	Jeddah	385 <sup>-91</sup>	1.281		
	3 new	Dammam	563 <sup>new</sup>	0.566		
	<b>4</b> <sup>-1</sup>	Месса	977 <sup>-282</sup>	0.168		

For more information about the rankings of cities, view the country dashboard on Startupblink.com.

# **Startup Ecosystem Overview**

Saudi Arabia is in the midst of an active transition from an oil economy to a digital economy that is more open and integrated with the world. As with all transitions, time is required to change the local mindset and to encourage more of its local population to take risks and build startups, namely women who have not received equal opportunities to participate in the economy.



Recently, however, the Saudi government has been focussing on increasing economic diversification by developing the private sector and increased inclusion.

The Kingdom is supporting different initiatives and investments to transform Saudi Arabia into an innovation-based economy. One of them is the "Technology Growth Financing" initiative, which offers quarantees for tech startups and SMEs for up to 90% of the funding amount. It was launched by The National Technology Development Program (NTDP) in a strategic partnership with the SMEs Financing Guarantee Program "Kafalah". Saudi startup ecosystems benefit from tremendous funding and forward thinking initiatives that promote startup enterprises. The Saudi market is also a great environment for startups to test products and services, as money is available, thanks to income earned from the oil industry.

Saudi Arabia is the largest technology market in the Arab MENA region, with a technology sector worth more than US \$40 billion. It is a regional leader in technology talent, with over 318,000 jobs in the technology sector and with a rising rate of participation of women in the ICT.

# Notable Startups and Ecosystem Champions

#### Foodics

# Riyadh, Saudi Arabia

Foodics is a restaurant management system that manages sales, transactions, inventory, employee schedules, and customer relationships.

# Sary

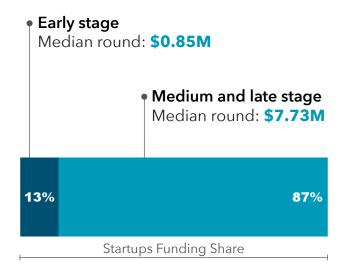
## Riyadh, Saudi Arabia

Sary is a MENAP B2B marketplace connecting small businesses with wholesalers and lenders to procure supply efficiently.

# Lean Technologies

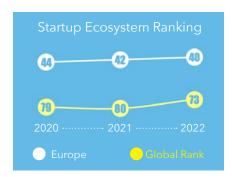
## Riyadh, Saudi Arabia

Lean Technologies is a fintech startup that develops a platform to provide access to consumer financial data.





# Georgia ranks 2nd in the CAREC region.



It has been a good year for Georgia. The country's ranking has improved by 7 spots to 73rd, resulting in Georgia climbing two positions in the Central Asia Regional Economic Cooperation (CAREC), overtaking Kazakhstan and Pakistan, and landing as the 2nd highest ranked country in the CAREC region, preceded only by China.

Tbilisi is the only ranked city in Georgia. Its ranking improved by 25 positions to 382nd, and It is both the 25th highest ranked city and the 4th highest ranked non-Chinese city in the CAREC region.

National Rank and Change	City	Global Rank and Change	Total Score	Overperforming Industry	
1 -	Tbilisi	382 <sup>+25</sup>	1.314		

For more information about the rankings of cities, view the country dashboard on Startupblink.com.

# Startup Ecosystem Overview

Georgia provides a good model for an open and transparent economy in Central Asia. The Ministry of Economy and Sustainable Development is focused on supporting startup ecosystem development, especially through its subdivision Georgia's Innovation and Technology Agency (GITA). The program of Startup Georgia is a good example of an active organization pushing the local ecosystem forward.

Several innovative centers and laboratories have opened in the country, as well as more than twenty Fab-Labs.

There are several business support platforms and organizations, such as Spark platform, Startup Factory by the University of Georgia, Batumi Business incubator (Batumi is the administrative centre of the Adjara republic, a Georgian autonomy), and Startup Grind Tbilisi.

Notable accelerator programs include Spark Business Accelerator in Tbilisi, FasterCapital (a branch of an international online incubator and accelerator), and the acceleration program 500 Startups, launched with the support of the World Bank.



Georgia is also becoming increasingly popular with expats and digital nomads, which will add to its future knowledge base and talent pool.

Georgia benefits from same day registration of business and startup friendly tax laws. The country is affordable and accessible, with low labor costs and market access to Europe. More than 60% of the country's population is English speaking.

The main challenges of Georgia's startup ecosystem are a lack of experienced entrepreneurs and a small consumer market, which is expected from a country with such a small population. There is also less access to financial capital from both foreign and domestic investors. Startups mostly receive funding from state programs and competitions, and different banks have their own investing programs.

Yet, Georgia's startup ecosystems have been very active with all the supporting initiatives implemented in the country, which help young entrepreneurs develop and launch their innovative business ideas. The next phase will require results on the ground, which will have to be produced by Georgia's entrepreneurs.

In response to the results of the Index, the Mayor of Tbilisi, Kakha Kaladze, said:

"Tbilisi has become a focal point for tech innovation in the region, and our continuous effort to support and maintain startup ecosystem is giving the first signs of growth. It's very important that organizations such as Startup Blink are doing progress on gathering data from local communities to showcase full potential of startup ecosystems"

# Notable Startups and Ecosystem Champions

### Humanode

Batum, Georgia

Humanode is a crypto-biometric network.

## PAYZE

Tbilisi, Georgia

PAYZE is an ecommerce platform for all online payments.

# BitSport

Tbilisi, Georgia

BitSport is bringing a new economy to light, unlocking a new age of incentivized gaming.

# **Our Ecosystem Partner**



# 74 | Kazakhstan

# Kazakhstan continues climbing up the Index.



Kazakhstan has maintained its positive momentum from last year and improved 2 positions to rank 74th globally, 17th in Asia Pacific and 12th in Asia. Kazakhstan has maintained its 3rd rank in the CAREC (Central Asia Regional Economic Cooperation Program) business region, preceded by China and Georgia, however the score gap from Georgia is very small.

Nur-Sultan, which displaced Almaty as the highest ranked city in the country last year, gained 14 spots to rank 343rd,

while Almaty has gone down by 10 positions to 633rd. Nur-Sultan and Almaty are the 3rd and 8th highest ranking non-Chinese cities in the CAREC region.

п	National Rank and Change	City	Global Rank and Change	Total Score	Overperforming Industry	ш
	1 -	Nur-Sultan	343 <sup>+14</sup>	1.567	***************************************	
	2 -	Almaty	633 <sup>-10</sup>	0.467		

For more information about the rankings of cities, view the country dashboard on Startupblink.com.

# **Startup Ecosystem Overview**

Kazakhstan's startup ecosystem is still in the early stages of development, and there remains much to be done to continue developing and solidifying the country's position as a hub for Central Asia. The country's economy is mainly sustained by the oil and gas industry, and the country aims to transition to a knowledge-based digital economy.

Thankfully, there are plenty of potential funding opportunities for developing initiatives that can support growth and innovation.

The government is taking confident steps toward attracting startups by creating innovation technology parks, hubs, and accelerator programs. Thanks to these initiatives, Kazakh startups have access to some capital at early stages in their development.



Additionally, in 2018, the government invested in Nur-Sultan to help develop the city into a financial center, and the <u>Astana Hub</u>, a technopark of IT startups was established.

Other than a strong economy which can actively support its local startup ecosystem, an additional advantage for Kazakhstan is the support of the universities for the startup scene. Most notably, Nazarbayev University established an Innovation Cluster (NURIS) that offers resources, training, and investment for high-tech.

The development of the Kazakhstan startup ecosystem depends on the country's openness to the international community. As a relatively young country with a developing startup scene, Kazakhstan now has the opportunity to set the foundation for future growth. Attracting foreign investment and continuing to encourage entrepreneurship should be a key focus for the country.

# Notable Startups and Ecosystem Champions

## Clockster

Astana, Kazakhstan

Clockster is an HR platform for blue-collars.

# HR Messenger

Almaty, Kazakhstan

HR Messenger is automating the recruitment funnel and onboarding using conversational AI and RPA.

# SuperFroot

Almaty, Kazakhstan

SuperFroot is an online marketplace and consumer app.



# Albania goes 3 positions up, as Tirana jumps 6 positions in the Balkans.



Albania has improved its ranking by 3 positions to 75th globally, as well as 20th in Eastern Europe and 9th in the Balkans.

A single Albanian city is present in the Index: the capital and largest city of Tirana. It has a positive momentum this year, improving its position by 27 spots to rank 461st. Among Balkan ecosystems, Tirana booked impressive progress this year, rising from 18th to 12th regionally and overtaking, among others, the Greek city of Thessaloniki.

The very small score gaps between the cities ranked 9th through 12th in the Balkans provide Tirana with a real opportunity to climb up in regional rankings next year, if this positive momentum continues.

п	National Rank and Change	City	Global Rank and Change	Total Score	Overperforming Industry	
	1 -	Tirana	461 <sup>+27</sup>	0.860		

For more information about the rankings of cities, view the country dashboard on Startupblink.com.

# Startup Ecosystem Overview

Albania's startup ecosystem is still in the early stages of development, however there are both public and private sector efforts to boost startup development and entrepreneurship. Albania has a great talent base, with skilled IT workers that have already created notable projects, such as Kreatx.

Albania has the necessary foundations for becoming a success story in the near future. The local startup community is full of enthusiasm, and the country provides various support systems with the help of international development organizations. There are also stakeholders like EBRD that support and guide startups and facilitate access to international markets and investment networks.



Over the last few years, Albania has developed several innovation activities and initiatives, such as <a href="Swiss">Swiss</a>
<a href="Entrepreneurship Albania">Entrepreneurship Albania</a>, <a href="Pro-Tik Center">Pro-Tik Center</a>, and <a href="ICTSlab">ICTSlab</a>, all formed with the goal of encouraging entrepreneurial skills and mindsets within the local population. Additionally, local software development companies have been eligible for tax relief since early 2019.

As one of the countries with the biggest brain drain in the Western Balkans since 2010, Albania's startup ecosystem is still very young. However by creating and growing a skilled and educated workforce, soon there could emerge a sustainable startup ecosystem with focus on tech companies.

The EU has raised funds for startup development and financing to help Tirana become a major innovation hub in the region. To continue the nation's growth trajectory, Tirana should produce higher quality initiatives and Albania should strive to develop additional startup ecosystems outside Tirana.

# Notable Startups and Ecosystem Champions

# Gjirafa

## Tirana, Albania

Gjirafa is a video content and e-commerce platform for the Balkans built on top of an Albanian language specialized search engine.

#### Baboon

### Tirana, Albania

Baboon is a food delivery marketplace that enables users to order online from local restaurants through its website or mobile application.

#### Rubicon

# Tirana, Albania

Rubicon is a financial technology company that provides financial solutions and develops a payment processing network.

# **Our Ecosystem Partner**



**Our Report Partner** 





# Karachi overtakes Lahore as best ranked city in Pakistan.



Pakistan has dropped one spot in 2022 to rank 76th globally, and maintains its 2nd rank in South Asia. Pakistan is ranked 4th in the CAREC (Central Asia Regional Economic Cooperation Program) business region.

The financial hub of Karachi has emerged as the highest ranked city in Pakistan, taking the position from Lahore. Karachi is ranked 10th in South Asia after improving 4 spots, and is the only non-Indian city in the regional top 10. Globally, Karachi lost 5 spots to rank 291st, while

Lahore dropped a heartbreaking 48 positions to rank 305th. The 2 top cities continue to be closely ranked, just like last year.

The capital, Islamabad, is the 3rd ranked city in Pakistan, and dropped 1 position to 438th. This year has not been good for city rankings of smaller Pakistani cities - Faisalabad, Rawalpindi, Multan, and Jhelum are out of the global top 1000, leaving Pakistan with only three ranked cities, versus 7 in 2021.

National Rank and Change	City	Global Rank and Change	Total Score	Overperforming Industry	1
<b>1</b> +1	Karachi	291 <sup>-5</sup>	2.220		
<b>2</b> <sup>-1</sup>	Lahore	305 <sup>-48</sup>	2.002		
3 -	Islamabad	438 <sup>-1</sup>	0.981		

For more information about the rankings of cities, view the country dashboard on Startupblink.com.



# **Startup Ecosystem Overview**

With a population of over 220 million, Pakistan's economy has massive potential to grow. For this to happen, digitalization and successful startups will be a critical element. Amid the COVID-19 pandemic, digital entrepreneurship increased side by side with investment in local startups. Moreover, the digital infrastructure in Pakistan has seen improvement with the introduction of broadband internet coverage, including 4G. All this came together with new legal frameworks that regulate and promote digital payments, investment, and credit under the Digital Banking Policy (SBP). In addition, the government set up Special Technology **Zones** offering several tax exemptions and incentives.

Pakistan has come a long way with its legal framework, but there are still some areas that require more clarity when it comes to taxation or incentives for domestic investments. The country's turbulent political climate is not helping to create certainty and stable policies to boost the local startup ecosystem. In addition, the spike in funding and startups needs to be fueled by talent with experience in scaling startups. To sustain this need, the country needs to come up with ways of providing its startup ecosystems with qualified and trained personnel.

The country has not yet produced its first unicorn, but we hope to see this happen soon if the startup scene sustains its growth and continues to attract investment.

# Notable Startups and Ecosystem Champions

# **⊃** Tajir

#### Lahore, Pakistan

Tajir is a marketplace for small businesses in Pakistan.

# **⇒** Finja

## Lahore, Pakistan

Finja is a financial services platform that offers payments, lending, and collection services to professionals and SMEs.

# SadaPay

#### Islamabad, Pakistan

SadaPay is bringing modern financial services to Pakistan.



# Beirut has seen a massive drop of 112 places.



Lebanon dropped 3 positions to rank 77th, maintaining the 6th spot in the Middle East and 11th in the Middle East & Africa region. Lebanon's lower ranking can be attributed to Beirut's massive drop of 112 places to 464th. Beirut is the only ranked city in the global top 1000 from Lebanon.

ı	National Rank and Change	City	Global Rank and Change	Total Score	Overperforming Industry	
	1 -	Beirut	464 <sup>-112</sup>	0.849		

For more information about the rankings of cities, view the country dashboard on Startupblink.com.

# **Startup Ecosystem Overview**

Lebanon has a complicated economic situation due to multiple political and financial challenges. The after effects of the COVID-19 pandemic and the severe explosion in Beirut in 2020 impacted entrepreneurship as priorities shifted toward reconstruction and relief projects.

The government allows unrestricted foreign investment, but has a bloated bureaucracy, making it difficult to establish and scale a startup in the country. Now is the time for Lebanon to leverage its resources and encourage more young people to build their own

projects. Lebanon has the advantage of a multilingual population with a high percentage of English, French, and Arab speakers. Moreover, Lebanon has a strategic location, a free market economy, and good relationships with the international community. The country could leverage these advantages and create a powerful startup scene. As in other countries in the MENA region, the local startup ecosystem's destiny will greatly depend on convincing local entrepreneurs to stay in the country instead of immigrating to more stable hubs such as Dubai, Europe, and the USA.



# Notable Startups and Ecosystem Champions

## Toters

#### Beirut, Lebanon

Toters is a tech company that operates a range of products, including Marketplace, eGrocery, Courier Services, and Payments.

# InMobiles

## Beirut, Lebanon

InMobiles is a leading Telecom Solutions and an Open Connectivity SMS Hub provider.

# Drapp

# Beirut, Lebanon

Drapp is a platform allowing billable medical consultations between doctors and patients through a smart chatbot.



#### Panama maintains a positive momentum for a 3rd year.



Panama has maintained its positive momentum from 2020 and 2021, further climbing up the rankings by 5 spots to 78th globally. This growth can be attributed to Panama City's rise in the Index by 47 positions to 422nd globally. Panama has also maintained its 3rd rank in the Central America region.

ı	National Rank and Change	City	Global Rank and Change	Total Score	Overperforming Industry	п
	1 -	Panama City	422 <sup>+47</sup>	1.098		

For more information about the rankings of cities, view the country dashboard on Startupblink.com.

#### **Startup Ecosystem Overview**

Panama is a relatively low population country of just above 4 million, with increased geopolitical importance due to the Panama canal connecting the Atlantic and Pacific. In spite of its small population, the country is one of the most developed in the region, and benefits from close ties to the United States. Most of Panama's GDP still comes from revenue from canal tolls, and the country is politically and economically stable compared to other countries in the region.

Panama also attracts expats due to its great weather, low territorial tax system, and a relatively low cost of living. Panama shares a time zone with many US cities, and the Panamanian Balboa is pegged to the US dollar at a 1:1 ratio. Additionally, there are a large number of women entrepreneurs in Panama, leading to a gender neutral business environment.

Panama offers various opportunities for investors, entrepreneurs, and creative professionals. Panama's <u>City of Knowledge</u> (Ciudad del Saber) initiative is a government-sponsored cluster of academic institutions, technology businesses, and non-governmental organizations which support startups and entrepreneurs.



The country implemented the <u>Friendly</u> <u>Nations Visa</u> in 2013 to attract entrepreneurs, investors, and creative professionals from selected countries who have professional or economic ties with Panama.

The Panamanian startup ecosystem is also supported by several private sector organizations, such as the <u>Founder</u> <u>Institute</u>, aimed at increasing innovation in the country.

Areas for improvement primarily include funding. Since venture capital is scarce in Panama, many startups are raising money abroad. In addition, the government should continue to energize its entrepreneurs and support them in establishing more startups, to further develop the nation as a hub for startups and investors in the region.

# Notable Startups and Ecosystem Champions

#### NordLocker

#### Panama City, Panama

NordLocker is an encryption tool that helps to store and share files and documents securely.

#### Ignite Tournament

#### Panama City, Panama

Ignite Tournaments is the world's first play-to-earn e-sports tournament organization and streaming app for mobile games with crypto payouts.

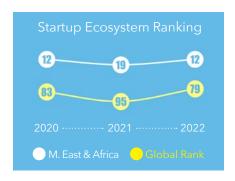
#### Cuanto

#### Panama City, Panama

Cuanto allows Latin American creators to monetize their audience and sell over social media.



# Morocco has improved by 16 spots to 79th rank, Casablanca has improved 39 spots to rank at 325th.



Morocco has seen an impressive increase of 16 positions to rank 79th globally. It has improved by 5 positions to rank 6th in Africa, and Morocco also ranks 2nd in Northern Africa, pushing Tunisia to the 3rd position after receiving a slightly higher total score. Within the Middle East & Africa region, Morocco now ranks 12th, a great improvement of 7 positions since 2021.

Casablanca has maintained its growth momentum from 2021 and improved by another 39 spots to 325th globally.

Casablanca is now 7th in Africa and 2nd in Northern Africa, displacing Tunis. However, Morocco's smaller cities have seen their ranks deteriorate for a 3rd year in a row: Agadir has fallen 167 places to 721st and Rabat has decreased by 138 places 991st, and is now at risk of dropping out of the Index next year.

п	National Rank and Change	City	Global Rank and Change	Total Score	Overperforming Industry	п
	1 -	Casablanca	325 <sup>+39</sup>	1.686		
	2 -	Agadir	721 <sup>-167</sup>	0.349		
	3 -	Rabat	991 <sup>-138</sup>	0.162		

For more information about the rankings of cities, view the country dashboard on Startupblink.com.



#### **Startup Ecosystem Overview**

Morocco's startup ecosystem offers an affordable and stable base for entrepreneurs and startups who want to target the North African market. With a young and talented population focused on technology and connectivity, Morocco has the potential to be a strong innovation hub in the region. To attest to that, we have witnessed in recent years an increase in the number of Moroccan youth becoming high quality freelancers, gaining expertise from their foreign clients. With the right initiatives, this knowledge could be used to build the next generation of Moroccan startups.

Moroccan entrepreneurs have seen some governmental support, with tax exemptions for startups and the Maroc PME initiative promoting small and medium enterprises. Also, a non-profit organization, StartUp Maroc, has committed to promoting entrepreneurship within Morocco.

Morocco has several capital funds for startups, such as Maroc Numeric Fund II and Innov Invest Fund. However, international investments are required for Morocco's startup ecosystems to grow. One of the most important hubs in Morocco is the Impact Lab founded in Casablanca, supporting social and environmental startups.

In 2022, the Government launched the initiative MoroccoTech as the national brand to promote the Moroccan digital sector and make Morocco an international digital hub.

Despite Morocco's startup funding reaching an all-time high in 2021, the startup ecosystem still faces significant

obstacles that limit growth. These challenges include economic and social issues shared by many countries, like low access to education and healthcare, gender inequality, and inadequate startup funding and legislation. If these are addressed, we are betting on Moroccan entrepreneurs to handle the rest and make a big impact on their local ecosystems.

# Notable Startups and Ecosystem Champions

#### Atlan Space

#### Rabat, Morocco

Atlan Space is building Artificial Intelligence to autonomously pilot any fixed-wing drone to monitor and take measurements over large areas.

#### KoolSkools

#### Casablanca, Morocco

KoolSkools is a collaborative learning platform that responds to pedagogical requirements by digitizing different processes.

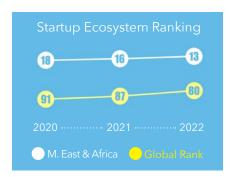
#### invyad

#### Casablanca, Morocco

invyad provides an end-to-end POS solution to empower MSMEs, helping them sell, run, and grow their activities.



#### Cape Verde continues on its successful growth trajectory.



Cape Verde has kept its growth momentum from the last 2 years and has improved its ranking by an impressive 7 positions to 80th globally. Cape Verde is ranked 7th in Africa, after overtaking Ghana, Tunisia, and Rwanda.

Praia, the only Cape Verde city in the global top 1000, registered an 18 spot increase to 606th, inching closer to the top 600 tier. Praia is ranked 17th in Africa, ahead of Luanda, Pretoria, and Ibadan.

In response to the results of the Index, the Prime Minister of Cape Verde, José Ulisses Correia e Silva, said:

"Cabo Verde's StartupBlink Index ranking is the latest indication yet that our sustained efforts to promote a culture of innovation are working. By empowering the nation's human capital and enacting policies to improve the ease of doing business, we have created the conditions for a thriving startup ecosystem. This distinction is also a testament to the ingenuity and perseverance of our entrepreneurs, who are demonstrating to the world that Cabo Verde can lead on a global scale. We are honored that StartupBlink has recognized our success, and we invite investors from around the world to join in our ascension."

National Rank and Change	City	Global Rank and Change	Total Score	Overperforming Industry	
1 -	Praia	606 <sup>+18</sup>	0.494		

For more information about the rankings of cities, view the country dashboard on Startupblink.com.



#### **Startup Ecosystem Overview**

Cape Verde is an island nation off the west coast of Africa with a population of just over 500,000 people. The country enjoys a strong public sector commitment to empower its national startup ecosystem. A new and energetic community of local entrepreneurs has already formed on the Island, and is generating high quality innovations with the potential to expand regionally and globally. Leading those efforts are NOSI and the Cabo Verde Digital initiative. Those initiatives have also successfully attracted foreign entrepreneurs and digital nomads to Cape Verde, likely due to great yearround weather and an easy connection to Portugal. It is also fortunate to see agencies such as Cabo Verde Trade Invest getting involved in shaping the country's narrative and promoting its advantages to the international community. Pró Empresa, a public sector agency tasked with promoting competitiveness and entrepreneurship, has set programs in place to encourage innovation among the younger generation.

Cape Verde enjoys a strategic geographic location that will likely be leveraged in the future to create infrastructure on a global level between Africa, the Americas, and Europe. The Cape Verde government provides support for early stage startups as well as digital training for entrepreneurs. The main challenges for startups in Cape Verde are the country's physical infrastructure and an undeveloped investment climate. The public sector seems to make progress in regards to the latter challenge by offering incentives for investors, such as a green card with fiscal benefits and

multiple tax exemptions. An additional challenge is a preference among most of the local population to avoid risk and entrepreneurship, opting for jobs in the more comfortable and certain public sector.

# Notable Startups and Ecosystem Champions

#### **⇒** Faxi

#### Praia, Cape Verde

Faxi is Cape Verde's largest online payment platform.

#### Flexbundle

#### Praia, Cape Verde

Flexbundle allows users to plan, track, automate, and measure work in one place.

#### **⇒** AKTO

#### Praia, Cape Verde

AKTO provides quality content from the sports world to all young enthusiasts in the sector who seek guidance and access to education.

#### Our Ecosystem Partner





#### Mongolia has jumped 7 spots to rank 81st.



Mongolia has seen an increase of 7 positions to rank 81st in the world. It is also ranked 5th in the Central Asia Regional Economic Cooperation (CAREC) business region, and 14th in Asia. Ulaanbaatar is the only ranked city in Mongolia, jumping 19 spots to 472nd globally and maintaining its positive momentum from the last 2 years. Ulaanbaatar is the 34th highest ranking city in the CAREC region, and the 7th highest ranking non-Chinese city in the region.

National Rank and Change	City	Global Rank and Change	Total Score	Overperforming Industry	
1 -	Ulaanbaatar	472 <sup>+19</sup>	0.810		

For more information about the rankings of cities, view the country dashboard on Startupblink.com.

#### **Startup Ecosystem Overview**

Most people know Mongolia for its nature and unique nomadic history, but the quality of Mongolian startups might soon make the country famous for its innovation as well. Mongolia's startup ecosystem is still developing, but it has the potential to greatly impact and transform the local economy. A surge in investment in human capital and digital connectivity offers an opportunity for this East Asian country to fortify its gains from agriculture and mining and take advantage of the demand for IT to create a startup ecosystem in its capital city, Ulaanbaatar.

While Mongolia started its digital reforms before the COVID-19 pandemic hit, the process was accelerated during the crisis. As a result, the country has now developed the platform E-Mongolia, following Estonia's model of e-governance. Such reforms are aimed at reducing bureaucracy, improving transparency, and offering faster services, and could also prove beneficial for the startup scene.

Mongolia has a population of around 3 million people; about 45% of this population is located in Ulaanbaatar.



Contributing to its development are the Science Industry Innovation Agency of Ulaanbaatar City and Startup Mongolia, an NGO that offers resources and networking opportunities to the startup scene in Mongolia. It is also encouraging to see events such as StartuP 2022 and Startup Week Ulaanbaatar take place, which is a sign that the ecosystem is maturing. Moreover, the nation is also activating its young talent with initiatives such as the Youth Business Mongolia program and the Activated 2030 project.

The Mongolian startup ecosystem still faces a number of challenges in terms of physical infrastructure and access to finance. Regardless, the Mongolian government is actively supporting the growth of entrepreneurship, and prioritizes innovation as a substantial engine of growth for the country.

# Notable Startups and Ecosystem Champions

#### WorldPlus

#### Ulaanbaatar, Mongolia

WorldPlus is an all-you-can-read digital magazines platform.

#### MEBORNY

#### Ulaanbaatar, Mongolia

MEBORNY is an online learning platform that helps students, companies, and governments gain the skills they need to reach their goals.

#### Unique Power Tech

#### Ulaanbaatar, Mongolia

Unique Power Tech is the first company in Mongolia to develop Virtual reality technology solutions.

#### **Our Ecosystem Partner**

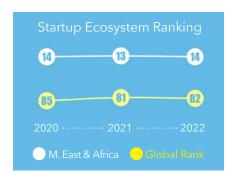


#### **Our Report Partner**





#### Ghana has decreased by one spot to rank 82nd.



Ghana has decreased by one spot to rank 82nd. Its ranking in Africa has also been reduced by 1 and it is now ranked at 8th regionally, however the gaps in scores between the countries in positions 6 through 10 are very small.

Accra, the only city from Ghana to make the global top 1000, has lost 15 positions to rank 296th, still in the top 300. Accra is ranked 6th in Africa and 2nd in Western Africa, preceded only by Lagos (1st), and keeping a safe gap from Abuja (3rd).

ı	National Rank and Change	City	Global Rank and Change	Total Score	Overperforming Industry	
	1 -	Accra	296 <sup>-15</sup>	2.209		

For more information about the rankings of cities, view the country dashboard on Startupblink.com.

#### **Startup Ecosystem Overview**

Ghana's startup ecosystem is constantly evolving and receiving direct foreign investment, mentorship, training, and other types of support from various organizations, including the Ghana Start-Up capital fund, the Ghana-India Kofi Annan Centre of Excellence in ICT, and 3 Day Startup. Meltwater Entrepreneurial School of Technology (MEST) is also active in its support of the local ecosystem. There are several startup networks, like the Ghana Hubs Network and the Accra Digital Centre that help prioritize startup oriented public sector policies.

The Ghanan startup scene has made strides in mobile finance, as the country is well known for its mobile money systems. There is also a rising trend of female entrepreneurship. While these female entrepreneurs are mostly found at the micro level and are not necessarily startup founders, with the right kind of public support, this trend could become a growth engine for the startup scene. That said, entrepreneurs in Ghana lack enough resources for capacity building and a support network equipped to help them face challenges. The startup scene in Ghana is still young and has a lot of room to evolve.



# Notable Startups and Ecosystem Champions

#### Zeepay

#### Accra, Ghana

Zeepay is a fintech startup that focuses on digital rails to connect digital assets.

#### **⇒** PEG

#### Accra, Ghana

PEG provides financing for solar home systems in West Africa.

#### **⊃** OZÉ

#### Accra, Ghana

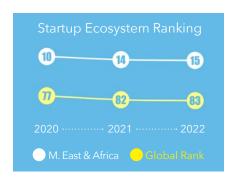
OZÉ is a habit-forming mobile app that makes it easy for SMEs in Africa to keep digital records, make better decisions, and access capital.

#### **Our Report Partner**





#### Tunisia is ranked 3rd in Northern Africa.



Declining in the Index for the 4th year in a row, Tunisia has decreased by one spot to rank 83rd globally. It ranked 3rd in Northern Africa, with Morocco overtaking it this year due to a slightly higher total score.

Tunis, the only ranked city from Tunisia, has dropped 76 spots to rank at 417th, losing the 2nd position among cities in Northern Africa to Casablanca and Morocco.

National Rank and Change	City	Global Rank and Change	Total Score	Overperforming Industry	
1 -	Tunis	417 <sup>-76</sup>	1.107		

For more information about the rankings of cities, view the country dashboard on Startupblink.com.

#### **Startup Ecosystem Overview**

The Tunisian startup ecosystem is still in the early phase of its development. The Tunisian government is well aware of the importance of creating startup hubs and passed a <u>Startup Act</u> in 2018; a legal framework designed to boost innovation and foster entrepreneurship.

Funding is a major barrier for startup and SME development in the country, as there is limited private equity and venture capital and the financial ecosystem is risk averse. Banks dominate in providing financing through high collateral lending. The World Bank is providing support to women and SME development in Tunisia through the Innovative Startups and SME Project. It supports the government's Startup Tunisia program and targets startups and innovative SMEs by fostering the entrepreneurship ecosystem, venture capital funds, incubators, accelerators, and coworking spaces.

The project recently launched an SME fund called <u>InnovaTech</u>, which focuses on investments in innovation and technology in digital media, renewable energy, agribusiness, ICT, media and ecommerce, and in all technologies related to digital transformation.



With proximity to the Middle East, the rest of Africa, and Europe, Tunisia has the ability to make far reaching international business connections. To grow, Tunisia's startup ecosystem needs to achieve a critical mass of high quality startups. The Tunisian private sector can help develop the local startup ecosystem by providing funding and mentorship for early stage startups, and by creating opportunities to help scale ideas and projects.

## Notable Startups and Ecosystem Champions

#### **⇒** Wattnow

#### Tunis, Tunisia

Wattnow is a real-time monitoring solution that provides a breakdown of energy spending to identify wasteful trends.

#### **⇒** GoMyCode

#### Tunis, Tunisia

GoMyCode is an educational platform that trains talents on digital skills and connects them with tech opportunities around the world.

#### Vneuron

#### Tunis, Tunisia

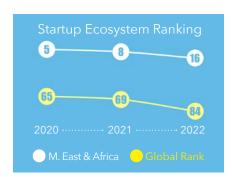
Vneuron provides Cloud and On-Premise Technologies for Anti Money Laundering (AML) and Digital Experience (DX/DXP).

#### **Our Report Partner**





#### Rwanda is now ranked 10th in Africa.



Continuing its negative momentum from 2020 and 2021, Rwanda has seen a notable decrease, dropping from 69th to 84th in the Index. This is a loss not only in ranking, but also in relative power, as the country that now ranks 69th has a score 2.3 times higher than Rwanda.

As a result, the country now ranks 10th in Africa, losing 6 spots regionally from last year. Interestingly, all but one of the countries ranking 79th through 84th are African countries, and the gaps in score between them are not

very big, such that the regional ranking may be reshuffled again next year.

The only ranked city in Rwanda is Kigali, which decreased 130 spots to rank at 395th. Kigali ranks 8th in Africa, and 2nd in Eastern Africa, where it has a reasonable gap from its closest contenders Kampala and Addis Ababa.

National Rank and Change	City	Global Rank and Change	Total Score	Overperforming Industry	п
1 -	Kigali	395 <sup>-130</sup>	1.235		

For more information about the rankings of cities, view the country dashboard on Startupblink.com.

#### **Startup Ecosystem Overview**

Rwanda offers an inspiring example of a country that was on the brink of failure, and has revived to become one of the most successful and organized economies in Africa. The next phase of developing a leading regional and global ecosystem will not be easy. This is especially true due to the country's relatively low population in comparison to many of its African counterparts, which makes it imperative

for its founders to focus on the global market. The government is well aware of the importance of startups to the future of the local economy, and has established one of the most independent and strategically thoughtful efforts to do so in Africa with several key support programs. For instance, the Entrepreneur Visas for ICT startups have made Rwanda an attractive relocation option for entrepreneurs in the region.



Moreover, following the example of other African countries, Rwanda is in the process of introducing a Startup Act set to incentivize the creation of innovative startups.

The startup scene attracts the attention of the private sector and the international community as well. For instance, the Norrsken Foundation opened an entrepreneurship hub in Kigali, while Co-Creation Hub partnered with Google and the Mojaloop foundation to launch the Fintech Innovation Project. Other major active stakeholders in the ecosystem include Impact Hub Kigali, KLab, and 250Startups. It is no wonder that the country managed to deliver several startup successes, including Carlsoko, Zipline International, Awesomity Lab, IsokoNow, and Yapili.

Rwanda's position as a prominent startup hub in Africa is partially thanks to a private sector driven economy and innovative government initiatives aimed at developing the country's startup scene. With low regulatory barriers to entry, Rwanda offers a number of business opportunities, such as financial incentives for national and international investors and the ability to register a new business in a single day.

Rwanda also provides market accessibility to other African countries, and with initiatives like the <u>Smart Rwanda 2020</u> <u>Master Plan</u>, the country is set to increase the number of digitally skilled workers. Rwanda also benefits from a developed 4G infrastructure with coverage for 97% of the country's population.

Rwanda has made notable progress in addressing the challenge of attracting funding to its startup ecosystems. The

Kigali Innovation City (KIC) project secured support from the Arab Bank for Economic Development in Africa (BADEA), and the Rwanda Innovation Fund opened its offices in Kigali. Even so, Rwanda still has major challenges to address like developing its infrastructure and setting up VCs and other funding options.

# Notable Startups and Ecosystem Champions

#### Bongalo

#### Kigali, Rwanda

Bongalo provides accommodation solutions for visitors, travelers, and business people.

#### Ampersand

#### Kigali, Rwanda

Ampersand is the e-mobility energy provider for millions of motorbike taxis.

#### NjordFrey

#### Kigali, Rwanda

NjordFrey provides aquaponic starter kits, seasonal input product lines, and operational training to developing farmers.

#### **Our Ecosystem Partner**



# 85 | Azerbaijan

#### Azerbaijan has improved by 4 spots to rank 85th.



Azerbaijan has improved by 4 positions to rank 85th, and 6th in the Central Asia Regional Economic Cooperation (CAREC) region.

Baku, the only ranked city in Azerbaijan, has increased 12 spots to 443rd globally, entering the top 450. It is the 31st highest ranking city in the CAREC business region (Central Asia Regional Economic Cooperation), and the 6th highest ranking non-Chinese city in this region.

In response to the results of the Index, Ulvi Mehdiyev, the Chairman of the State Agency for Public Service and Social Innovations under the President of the Republic of Azerbaijan, said:

"Azerbaijan has always been known as the Land of Fire. Today, thanks to our young talents and successful startups, we are confidently moving forward to be recognized as the Country of Innovations."

п	National Rank and Change	City	Global Rank and Change	Total Score	Overperforming Industry	
	1 -	Baku	443 +12	0.954		

For more information about the rankings of cities, view the country dashboard on Startupblink.com.

#### **Startup Ecosystem Overview**

Situated at the crossroads of Eastern Europe and Western Asia, Azerbaijan is working on making the country attractive to entrepreneurs and startup founders, and on transforming and digitizing its economy in order to disconnect from its oil dependency.

The <u>Social Innovation Lab</u> (Sil.), an entrepreneurship center, is aiming to create the first unicorn in Azerbaijan by 2025, as well as to help raise 50 tech startups every year. This is an ambitious goal for a country with a relatively small market size, but we love ambitious goals.



There are some notable ecosystem stakeholders that have helped shape the narrative of the startup scene. For instance, Azerbaijan has initiated the Azerbaijan 500 ASAN Startup Program, aimed at innovating and developing the country's budding startup ecosystem through online events. Moreover, the public sector signaled its support by establishing **INNOLAND**, an incubator, accelerator, and research center as well as a Hi-tech Park (HTP). The State Agency for Public Service and Social Innovations under the President of the Republic of Azerbaijan (ASAN) has been an important initiator of projects. Under ASAN, a collaboration with the Asian Development Bank was started in 2021, with a goal of boosting innovation in Baku and other cities. Another notable initiative is the Future Skills Project which will be implemented by ASAN together with 4 of the country's universities. It is also a positive sign to see the private sector supplement the need for funding, networking, and accelerators with initiatives such as the **NEXT STEP** Innovation Center and SUP VC. More initiatives like these will be needed to help grow entrepreneurship, increase networking opportunities between national and international startup developers, and encourage private investment.

# Notable Startups and Ecosystem Champions

#### Owbike

#### Baku, Azerbaijan

Owbike is a scalable cloud based website building system.

#### Botbox

#### Baku, Azerbaijan

Botbox helps businesses onboard customers seamlessly and automate marketing via the most popular messaging apps.

#### Nextsale

#### Baku, Azerbaijan

Nextsale is a software tool that allows personalizing on-page messages and social proof services.

#### **Our Ecosystem Partner**

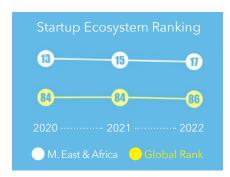


#### **Our Report Partner**





#### Qatar has decreased by two positions in the ranking.



After remaining stable last year, Qatar dropped 2 positions this year to rank 86th. It is ranked 7th in the Middle East, with almost twice the total score of the next highest country, Kuwait. Qatar ranks 17th in the Middle East & Africa region. Doha, the only ranked city from Qatar, has lost 63 positions to rank 531st globally, dropping out of the top 500 and ranking 17th in the Middle East and 30th in the Middle East & Africa region.

п	National Rank and Change	City	Global Rank and Change	Total Score	Overperforming Industry	П
	1 -	Doha	531 <sup>-63</sup>	0.636		

For more information about the rankings of cities, view the country dashboard on Startupblink.com.

#### **Startup Ecosystem Overview**

Qatar is one of the world's richest countries due to large oil and gas reserves, but should prepare for a period when oil will not be able to sustain its economy. According to the Qatar National Vision 2030, the government is making efforts to expand the economy and make it more flexible and competitive. In spite of the Qatar diplomatic crisis (2017-2021), the local tech ecosystem has remained relatively unscathed.

Moreover, in recent years, the country has started to attract foreign startups due to the favorable business environment for tech initiatives.

Qatar has a tight-knit startup community with a number of incubation centers, seed funding programs, and hubs, like the Qatar Science & Technology Park, the Qatar Business and Incubation Centre, the Digital Incubation Centre, and the Qatar Foundation (QF). Startups in the Qatar startup ecosystem benefit from close partnership with investors that help support and incubate innovative ideas.



# Notable Startups and Ecosystem Champions

#### **○** MaktApp

Doha, Qatar

MaktApp is a cloud-based project management tool for businesses.

#### Meddy

Doha, Qatar

Meddy enables people to find the best doctors based on community reviews.

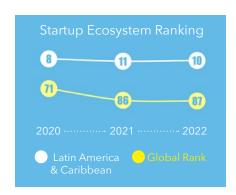
#### SmartSERP

Doha, Qatar

SmartSERP is a rank tracker tool, which keeps track of website search engine rankings.



#### Ecuador declined by one spot and is ranked 87th.



Ecuador's global ranking has gone down by 1 position to 87th. Nevertheless, Ecuador maintained its rank as 7th in South America. Quito lost 61 spots to rank 460th globally, still in the top 500. Quito is ranked 16th among cities in South America.

Guayaquil, which entered the global top 1000 last year, dropped from the Index, leaving Quito as the only ranked city in Ecuador.

п	National Rank and Change	City	Global Rank and Change	Total Score	Overperforming Industry	п
	1 -	Quito	460 <sup>-61</sup>	0.871		

For more information about the rankings of cities, view the country dashboard on Startupblink.com.

#### Startup Ecosystem Overview

The Ecuador startup ecosystem is developing but has the potential to scale and become a regional hub in the future. For Ecuador to close the gap with other countries in the region, like Brazil, Chile, and Argentina, it will need to strengthen the startup ecosystem of its capital, Quito, and make sure other cities develop seed ecosystems to support the country's growth.

During the COVID-19 pandemic, technology startups accelerated their growth due to favorable legislation created by the government. There is still much to be done in terms of investment policies and improving competition, but there are signs that the future will bring new reforms.

There are some interesting ecosystem enablers in Ecuador, such as the coworking spaces Latinnova and ConQuito, and the academy network of the Alliance for Entrepreneurship and Innovation (AEI). The country has not yet produced a unicorn, but there are definitely some great success stories, such as YaEesta, one of the first ecommerce platforms in the country.



The nation could leverage multiple strategic advantages. Since Ecuador's currency is US Dollars, and it shares a time zone with the US, some Americans are relocating to Ecuador and working remotely. If the public sector finds a way to motivate them to incorporate in Ecuador and hire local talent to grow their businesses, it could give Ecuador's startup ecosystem a much needed boost.

# Notable Startups and Ecosystem Champions

#### Kushki

Quito, Ecuador

Kushki is an online payment solution.

#### **⇒** YaEsta.com

Durán, Ecuador

YaEsta.com is the leading ecommerce company in Ecuador, focused on home, tech, and appliances.

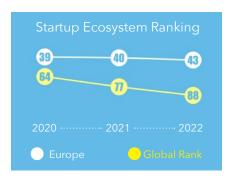
#### **⇒** FastFarma

Quito, Ecuador

FastFarma operates as a digital pharmacy.



#### Moldova has dropped 11 spots in the ranking.



Moldova has seen a steep decrease of 11 spots to rank 88th globally. It's the 2nd year in a row that the Eastern European country has seen a significant fall; Moldova was ranked 64th in 2020.

Chisinau is the only ranked city in Moldova. It has fallen 119 spots to 654th, and since no other Moldovan ecosystems are ranked, Chisinau's decline strongly affects the country's position in the Index.

Moldova is a small country, and having a single ranked city is understandable. The local ecosystem developers should focus on tapping the potential of Chisinau to grow its startup ecosystem further.

National Rank and Change	City	Global Rank and Change	Total Score	Overperforming Industry	ш
1 -	Chisinau	654 <sup>-119</sup>	0.434		

For more information about the rankings of cities, view the country dashboard on Startupblink.com.

#### **Startup Ecosystem Overview**

There are a number of factors contributing to the potential of Moldova's startup ecosystem, including tax incentives and one of the most affordable digital talent pools in Europe. Additionally, Moldova has made efforts to develop an interconnected network of startups, experienced founders, and corporate funding. Moldova's capital, Chisinau, has much potential, and could be turned into an entrepreneurial hub due to its low cost of living, great

location between the EU and CIS, tech talent pool, and high internet connection quality. Moldova also enjoys segments of its population speaking either Romanian or Russian, which also allows local entrepreneurs to expand to those markets.

With limited resources to spend on support initiatives, the public sector has managed to establish seven Free Economic Zones and eight Industrial Parks, on top of tax incentives and free trade agreements with several countries.



When it comes to the tech infrastructure and digitalization, Moldova is catching up. The nation now boasts the Moldova Innovation Technology Park as well as platforms such as Invest Moldova and Startup Moldova that are meant to inform and catalyze startup ecosystem stakeholders.

Other programs, such as Start pentru tineri, have been designed to encourage entrepreneurship among the younger generation. Every founder counts, and Moldova should do its best to avoid losing too many of its brightest minds to countries that offer more opportunities. While it's too early to talk about a unicorn in Moldova, startups like Planable and Zeroqode are managing to scale in spite of being located in a small startup ecosystem. Moldova has some great prospects for the future, and it seems that more reforms are on the way as the country signaled its wish to enter the EU.

# Notable Startups and Ecosystem Champions

#### Fagura

#### Chisinau, Moldova

Fagura develops a marketplace based on p2p lending technology, where people looking for loans meet with investors.

#### **⇒** XOR

#### Chisinau, Moldova

XOR is a modern communication software for efficient recruitment, hiring, and talent retention.

#### Planable

#### Chisinau, Moldova

Planable is a marketing collaboration platform used for content review, approval, and publishing.



#### Andorra makes a debut with rank 89th.



The microstate of Andorra makes a debut in the global startup ecosystem Index this year, entering the Index at the impressive rank of 89th. The capital city, Andorra la Vella, which made a debut last year in the global top 1000, has improved by 69 spots to rank 733rd and enter the top 800.

п	National Rank and Change	City	Global Rank and Change	Total Score	Overperforming Industry	п
	1 new	Andorra la Vella	733 +69	0.333		

For more information about the rankings of cities, view the country dashboard on Startupblink.com.

#### **Startup Ecosystem Overview**

Andorra, one of the smallest countries in Europe, is located in the Pyrenees mountains, locked between France to the north and Spain to the south. The main source of income for Andorrans is tourism, which accounts for the majority of the country's GDP. The Banking sector is secondary, as it enjoys a tax haven status. Andorra also has many EU trade privileges despite being a Non-EU country.

Over the last few years, Andorra has been promoting innovation through collaborative initiatives with various international centers and entities, such as the Massachusetts Institute of Technology (MIT), Google, Visa, the Quartier de l'Innovation in Montreal (Canada), and Carto, one of the top companies in data analysis and spatial data visualization. In this way, the Pyrenean nation is transforming into a genuine innovative living lab, with projects spanning mobility, energy, the environment, and tourism.



One of the key players in supporting the innovation, competitiveness, and sustainability of the Andorran entrepreneurial ecosystem is <u>Andorra Business</u>, an agency for economic development in Andorra.

Andorra has made significant efforts to modernize its political system and, as a result, to establish an investment and business-friendly climate. The country is wide open to foreign capital and has managed to create a favorable tax environment.

The opportunity for this small, landlocked country to develop its startup ecosystem lies in thinking outside of the box.

# Notable Startups and Ecosystem Champions

#### Trustnav

#### Andorra la Vella, Andorra

Trustnav is creating a safer browsing experience, free of distracting advertisements and invasive tracking methods.

#### Edactis

#### Andorra la Vella, Andorra

Edactis contributes to the democratization of education and helps organizations that need it.

#### All Andorra

#### Andorra la Vella, Andorra

All Andorra is a non-Catalan news website which covers various topics affecting Andorra.

#### **Our Ecosystem Partners**







#### Sri Lanka has jumped 2 spots in the rankings to rank 90th.



Despite a tough economic situation in 2022, Sri Lanka has improved by 2 positions to rank 90th globally, maintaining positive momentum for a second year. It has also maintained its 3rd rank in South Asia, with a narrow lead over Bangladesh. Often, adverse economic conditions push more people into entrepreneurship in an effort to disconnect from the classic economy.

The country's capital Colombo has improved by 17 points to rank 357th globally. Regionally, in South Asia, an area

dominated by Indian ecosystems, Colombo ranks 14th, and 4th among the non-Indian cities in South Asia.

Although Colombo remains the only city from Sri Lanka in the global top 1000, we surmise that the positive results this year are partially due to the country's ability to develop seed activity in multiple cities. Although this level of activity has not yet pushed these cities into the global rankings, it has contributed to the country's overall ranking. With further investment in these ecosystems, Sri Lanka may be in the position to substantially increase its position in the Index next year.

National Rank and Change	City	Global Rank and Change	Total Score	Overperforming Industry	П
1 -	Colombo	357 <sup>+17</sup>	1.474		

For more information about the rankings of cities, view the country dashboard on Startupblink.com.

#### **Startup Ecosystem Overview**

Sri Lanka does not yet have enough startups to be in the same category as other Asian startup hotspots, but its potential is evident. However, unless resolved quickly, the recent lack of political stability and a severe economic crisis will impact the country's ability to continue growing its tech sector.

In any case, the country's ecosystem developers should continue to empower their entrepreneurs and help them set up and build their startups through incentives or mentoring.



The Information and Communication
Technology Agency (ICTA) of Sri Lanka
has engaged with many ecosystem
stakeholders in implementing initiatives
supporting startup development. The
Spiralation Seed Funding Program and
Tech Startup Support Program aims to
support and promote new technology
businesses to prepare them for the
global market. Startup SL is a national
online platform for Sri Lankan startups,
an initiative by the Ministry of Digital
Infrastructure & Information Technology,
and is currently being operated by ICTA.

ICTA also initiated 10,000 Ideas, an islandwide tech innovation program intending to empower the next generation of tech entrepreneurs, and a Credit Evaluation Framework in collaboration with PwC Sri Lanka, as an alternative to the conventional approach and to assist technology companies in obtaining credit facilities.

Global startups, such as Oyo and Ikman, as well as international startup brands such as <u>Startup Weekend</u> by TechStars, Seedstars, and AngelHack, that have entered the Sri Lankan ecosystem are promising signs of potential.

In response to the results of the Index, the Secretary to the Ministry of Technology of the Government of Sri Lanka, Jayantha De Silva, said:

"I am thrilled to note that Sri Lanka has increased its country rankings in this year's Global Startup Ecosystem Index, while Colombo as a city has increased its rankings by 17 points. It is a clear testament that the effort put into developing the startup ecosystem of Sri Lanka is being recognized globally. ICTA is at the forefront of nurturing

and supporting the growth of startups in Sri Lanka and operates with a vision of establishing 1000 startups by the end of 2024. ICTA has initiated many initiatives such as Spiralation, SPARX Lab, STEP etc together with startup ecosystem enablers to bring forward the entrepreneurial skills of our youth and encourage existing startups to take their business to the next level and expand globally. Sri Lanka as a nation is on a transformational journey, and it is an opportune moment to be supporting startups to materialize their innovative ideas by providing the technological, financial, and operational support to take their enterprises to the next level."

# Notable Startups and Ecosystem Champions

#### Arimac Lanka

Colombo, Sri Lanka

Arimac Lanka is a fully fledged digital solutions provider for businesses.

#### XpressJobs

Colombo, Sri Lanka

XpressJobs is Sri Lanka's premier Job Board. A marketplace tasked to help companies hire the best talent.

#### **○** oDoc

Colombo, Sri Lanka

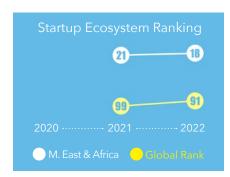
oDoc is a B2B telemedicine app.

#### **Our Ecosystem Partner**



# 91 Namibia

#### Namibia has improved by 8 spots to rank at 91st.



After joining the Index in 2021, Namibia continued its growth trajectory this year, improving its position by another 8 spots to rank 91st. Namibia is ranked 2nd in Southern Africa and 11th in Africa, two positions higher than in 2021.

The capital of Namibia, Windhoek, ranks 700th after improving a massive 156 spots, and is the only ranked city in the country to break into the top 700. Regionally, Windhoek is ranked 5th in Southern Africa and 22nd in Africa (up 3 positions).

In response to the results of the Index, the CEO and Chairlady of the Namibia Investment Promotion and Development Board, Ms. Nangula Uaandja, said:

"Startups are instrumental in the economic growth of any nation, more specifically Namibia. The World Bank found that for a growing economy, the establishment and support of startups will generate revenue domestically, where consumers' capital will flow around in our local economy. Startups have the ability to change the world, by innovating and being creative to the demands of not only our nation but the interconnected planet. Developing one's idea into a startup and contributing to our economy will create much needed employment opportunities, which is fundamental for a private sector lead economy like Namibia."

National Rank and Change	City	Global Rank and Change	Total Score	Overperforming Industry	П
1 -	Windhoek	700 <sup>+156</sup>	0.374		

For more information about the rankings of cities, view the country dashboard on Startupblink.com.



#### **Startup Ecosystem Overview**

The Namibian startup ecosystem is hoping to offer local entrepreneurs a secure and stable environment which will promote entrepreneurship and innovation in the region. The main challenges for Namibian startup ecosystems are the lack of physical infrastructure, heavy bureaucracy and administrative requirements, access-to-market, and low levels of funding for startups. There is also work to be done in developing sufficient entrepreneurial talent in Namibia, especially given the country's small population of only 2.5 million. The country will need a stronger entrepreneurship network if it hopes to become a regional innovation hub.

Although Namibia still has a long way to go to develop a successful start-up ecosystem, there are several organizations, such as <a href="Impact Tank">Impact Tank</a>, <a href="Dololo/DoBox">Dololo/DoBox</a>, <a href="UNDP Accelerator">UNDP Accelerator</a>, and <a href="Start-up Namibia">Start-up Namibia</a> that are encouraging innovation and creating a more competitive business environment.

Start-Up Namibia, a non-profit organization which aims to improve the conditions for the establishment and

growth of startups in selected regions in Namibia, runs an incubation and innovation center called <u>Basecamp</u> and works with the <u>Digital Transformation</u> <u>Center</u> on challenges for digital start-ups and enhancing digital skills.

To sum up, the startup scene in Namibia is still in its very early stages, but its seed activity provides promise for the future.

# Notable Startups and Ecosystem Champions

#### Jabu

#### Windhoek, Namibia

Jabu is a marketplace and distribution partner, offering tech-enabled, route-to-market development and merchandising.

#### EBikes4Africa

#### Windhoek, Namibia

EBikes4Africa specializes in empowering local communities through e-mobility and solar powered services.

#### **⇒** LEFA

#### Windhoek, Namibia

LEFA is a mobile app that connects individuals and companies who need safe, reliable, and convenient on-demand transportation.

#### **Our Ecosystem Partner**



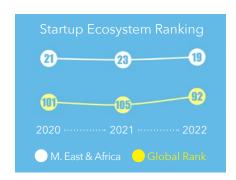


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Deutsche Gesellschaft
für Internationale
Zusammenarbeit (GIZ) GmbH



### Senegal has entered the top 100 country ranking for the first time at 92nd.



Senegal enters the global top 100 country list for the first time this year. It is also ranked 4th in Western Africa and 12th in Africa. The country's capital, Dakar, has seen an impressive jump of 333 spots to rank 494th globally, entering the top 500 tier.

Dakar is ranked 4th in Western Africa, after improving 3 positions from last year. It is the 13th highest ranked city in Africa. Dakar remains the only ranked city in Senegal.

National Rank and Change	City	Global Rank and Change	Total Score	Overperforming Industry	п
1 new	Dakar	494 +333	0.753		

For more information about the rankings of cities, view the country dashboard on Startupblink.com.

#### **Startup Ecosystem Overview**

Senegal is becoming increasingly popular for entrepreneurs and investors wanting to do business in West Africa. This is due to its favorable business climate and robust institutions. It is strategically located near major seaports, allowing it quick access to European and North American markets.

Senegalese startup ecosystems enjoy numerous investments from the private and public sectors into skill development, innovation funding, and programs such as accelerators and incubators. Senegal has become the second African country after Tunisia to pass a dedicated Startup Act, which aims to promote innovation and entrepreneurship in accordance with the Digital Senegal 2025 strategy.

International institutions such as the African Development Bank and GIZ have helped in boosting microfinance and empowering local youth and women entrepreneurs, SMEs, and startups through training, incubation programs, and professional placement.



Wave, a Senegal-based mobile money provider, raised the biggest ever Series A round in Africa in 2021, pushing its valuation to \$1.7 billion and making it Africa's first Francophone unicorn.

Wave's success, however, is the exception and not the rule in Senegal. Compared to countries like Nigeria or South Africa, Senegal still has a low level of startup investing, which shows the funding gap that exists between the anglophone and francophone West Africa regions.

However, through the government's support policies, there have been visible boosts to the Senegal startup scene, youth, and women entrepreneurship, and the general legal framework for entrepreneurship.

#### **Notable Startups and Ecosystem Champions**

#### ⇒ Wave Mobile Money Unicorn



Dakar, Senegal

Wave Mobile Money provides an app-based financial solution to save, transfer, and borrow money.

#### Paps

#### Dakar, Senegal

Paps is a logistics and delivery company that offers innovative distribution and delivery solutions to companies and merchants.

#### Kwely

#### Dakar, Senegal

Kwely is a B2B wholesale distribution platform.

#### **Our Ecosystem Partner**



#### **Our Report Partners**







#### Bangladesh has maintained its rank as 93rd.



Bangladesh has maintained its position of 93rd, showing stability, and is ranked 4th in South Asia, slightly behind Sri Lanka in total score.

The capital, Dhaka, dropped from the top 300, losing 63 positions to rank 326th globally. Regionally, in South Asia, an area dominated by Indian ecosystems, Dhaka ranks 12th, and 3rd among the non-Indian cities in South Asia, ahead of Colombo and Islamabad.

Bangladesh only has Dhaka in the global top 1000 this year after its seed ecosystems of Khulna and Chattogram dropped from the Index.

п	National Rank and Change	City	Global Rank and Change	Total Score	Overperforming Industry	
	1 -	Dhaka	$326^{-63}$	1.681		

For more information about the rankings of cities, view the country dashboard on Startupblink.com.

#### Startup Ecosystem Overview

Bangladesh is a country with a vast population in South Asia that borders India and Myanmar. The country has strong economic potential, which will require active support from the government to materialize. Top priorities should be improving infrastructure, including internet stability. The government should also work on policy support, arrangement of corporate venture capital, and improving industry-academia collaboration to support the growth of startups.

Last year we saw changes to the financial investment landscape in Bangladesh aimed at developing more opportunities for the local startup ecosystem. Bangladeshi startups raised funds at a rate nearly four times higher than the previous year, and the majority of this funding came from global investors.

Government policies and projects from the ICT Ministry, such as the <u>IDEA Project</u> and <u>Startup Bangladesh Limited</u> with U\$ 65 million, are helping to improve the local startup ecosystem.



Bangladesh's startup ecosystems are a potential digital treasure in Asia that require systematic country-level branding to attract more foreign investments and generate exposure.

# Notable Startups and Ecosystem Champions

#### Pathao

#### Dhaka, Bangladesh

Pathao is a super-app platform with services in ride-sharing, logistics, ecommerce, food delivery, payments, and more.

#### **⇒ 10 Minute School**

#### Dhaka, Bangladesh

10 Minute School is a web-based educational platform based in Bangladesh where students can learn, practice, and progress.

#### Arogga

#### Dhaka, Bangladesh

Arogga is a healthcare platform that delivers medicine directly to the client's door.

#### **Our Ecosystem Partner**



#### **Our Report Partner**



# 94 Jamaica

#### Jamaica has decreased by 15 positions in the ranking.



Jamaica has lost a significant 15 positions to rank 94th, completing an 18 spot decline in two years. After the Dominican Republic's drop out of the Index this year, Jamaica is the only ranked country from the Caribbean region.

Jamaica's capital, Kingston, ranked 685th in 2021, but this year dropped below the 1000 threshold and remained out of the Index. The same happened with Montego Bay, which ranked 958th in 2021. As such, Jamaica is in the unusual position that it is still ranked as a country, but none

of its cities are ranked. This situation occurs when our sampled startups within a country are divided across different cities, and no city has enough critical mass to participate in the rankings.

In order to preserve its position in the ranking next year, Jamaica will need to reverse the negative trends in Kingston and in Montego Bay.

#### Startup Ecosystem Overview

The Jamaican startup ecosystem is still in the early stages of development and offers entrepreneurs a number of startup incubators and business networks for startup growth. The country enjoys proximity to the United States and the majority of the population has high English proficiency, facilitating business expansion.

Kingston, the capital of Jamaica, is one of the main technology and subcontracting centers in the Caribbean, and has in recent years developed a number of initiatives to support startups and incubators.

The local market might not be the biggest but it has definitely nurtured a substantial company: Digicel, a mobile phone network provider operating in 33 markets across the Caribbean, Central America, and Oceania regions. Additionally, the <a href="Inter-American Development Bank">Inter-American Development Bank</a> has helped promote the innovation and growth of the Jamaican ecosystem through a special <a href="IDB Lab">IDB Lab</a> program aimed at developing youth competencies.

Jamaica is supporting sustainable and robust growth of micro, small, and medium-sized enterprises (MSMEs) with non-reimbursable investment financing approved by the Inter-American Development Bank, and with funds from the <u>European Union's Caribbean</u>



#### **Investment Facility** (CIF).

Funding is promoting gender equality, climate change, and response to COVID-19 to drive business innovation and productivity.

While Jamaica's startup ecosystem is still growing, it is dynamic and has deep development potential.

# Notable Startups and Ecosystem Champions

#### **⇒** AirDrop

#### Montego Bay, Jamaica

AirDrop allows users to shop from any store worldwide and ship to Jamaica.

#### EduFocal

#### Kingston, Jamaica

EduFocal is an innovative social learning platform that combines study with play.

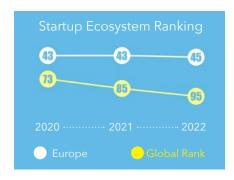
#### CredPal

#### Kingston, Jamaica

SmartTerm is a software solution for educational institutions with a unified student information and learning management system.

# 95 | Bosnia and Herzegovina

#### Bosnia and Herzegovina decreased by 10 positions to rank 95th.



This year, Bosnia and Herzegovina has seen a significant decrease of 10 positions to rank 95th globally, and is at risk of dropping out of the Index next year if the trend is not reversed. Sarajevo, the only ranked city from Bosnia and Herzegovina, has experienced a sharp decline of 262 positions to rank 895th globally.

National Rank and Change	City	Global Rank and Change	Total Score	Overperforming Industry	п
1 -	Sarajevo	895 <sup>-262</sup>	0.201		

For more information about the rankings of cities, view the country dashboard on Startupblink.com.

#### **Startup Ecosystem Overview**

Bosnia and Herzegovina is a fascinating place, full of talented people, but facing a problematic geopolitical situation which creates difficulties and uncertain conditions for its local entrepreneurs. One of the issues facing this beautiful country is the lack of success in convincing large global corporations to tap into its talented workforce, mainly due to geopolitical strains. This has pushed many talented IT professionals toward offering their services remotely to companies from the West, and has also resulted in brain drain as talented Bosnians move to richer countries.

Bosnia and Herzegovina's government has implemented a few important initiatives, and USAID along with other international organizations in the country have been actively involved in providing support.

Other key ecosystem players include various private and non-profit organizations, such as the Ministry of Programming (a prominent startup studio), STARTER, HUB387, Intera Technology Park, Foundation 787, and Foundation Mozaik.



The Bosnian startup scene is still not focused on specific technologies. There are startups in ecommerce, blockchain, HR, and many other industries. Similar to other countries in the Balkans, the IT outsourcing industry is popular, but things are changing, and with the right incentives Sarajevo may become an important technology hub in the region.

# Notable Startups and Ecosystem Champions

#### Rolla

#### Mostar, Bosnia and Herzegovina

Rolla apps help users track, compete, and have fun while working out, both outdoors and indoors.

#### Gotiva Games

#### Sarajevo, Bosnia and Herzegovina

Gotiva Games is a social multiplatform puzzle game developer.

#### Tayra

#### Sarajevo, Bosnia and Herzegovina

Tayra is an employee performance analytics platform, making staff recognition and rewards easy.

# 96 | Kosovo

#### Kosovo debuts in the top this year with a rank of 96th.



Kosovo is in the StartupBlink country Index for the first time this year with a rank of 96th, and is one of 5 countries to make its debut. Pristina, the capital of Kosovo, debuts in the city rankings at 924th, and is now the 23rd highest ranked city in the Balkans.



For more information about the rankings of cities, view the country dashboard on Startupblink.com.

#### **Startup Ecosystem Overview**

Located in the heart of the Balkans, Kosovo offers easy access to the EU, Central European, and Balkan markets. The country's development, as measured by its gross domestic product (GDP), has been favorable in recent years, with positive and steadily growing trends aside from a short dip during the COVID-19 pandemic.

Kosovo is an appealing environment for international investors because of its efficient tax structure, abundant natural resources, easy business registration, and transparent rules on foreign investment.

The Kosovar government and various organizations in Kosovo have shifted their focus to boosting the startup ecosystem as the ICT industry has developed and the number of start-ups has continued to grow.

Despite receiving support, many startups struggle to succeed and the startup failure rate remains high. A main growth challenge for most startups is lack of funding.

Some of the notable ecosystem support organizations are <u>StartUp Kosovo</u> and <u>Innovation Center Kosovo</u>, encouraging the innovation and growth of the startup community in Kosovo.



Collaboration between relevant support organizations, universities, and the government is growing, and it is critical that Kosovo's startup ecosystems adopt developed-country patterns in order to thrive in the next few years, particularly in the R&D sector.

# Notable Startups and Ecosystem Champions

#### MerrJep.com

#### Pristina, Kosovo

MerrJep.com is a large trading site in Kosovo with the goal of providing the public an easy, safe, and fast way to sell or buy new or used products and services online.

#### Spinp Agency

#### Pristina, Kosovo

Spinp Agency specializes in creating and developing professional websites for a wide range of businesses and organizations.

#### Cosovo 2.0

#### Pristina, Kosovo

Kosovo 2.0 engages society in insightful discussion through print and online magazines, debates, and advocacy initiatives. They are dedicated to deepening the understanding of current affairs in Kosovo, the region, and beyond.

#### **Our Ecosystem Partner**



#### **Our Report Partner**





# Angola has entered the top 100 country ranking for the first time this year at 97th.



Angola has made its debut among the global top 100 countries this year with a rank of 97th. It is ranked 13th in Africa after improving 8 places, and 1st in the Central African region.

Angola's improvement was caused by the growth of its capital, Luanda, which has massively improved by 321 places to rank 631st globally. Note that Luanda entered the top 1000 city Index last year with a rank of 952nd. Luanda is also ranked 18th in Africa, after jumping 13 spots.

National Rank and Change	City	Global Rank and Change	Total Score	Overperforming Industry	
1 new	Luanda	631 <sup>+321</sup>	0.467		

For more information about the rankings of cities, view the country dashboard on Startupblink.com.

#### Startup Ecosystem Overview

Angola is one of Africa's largest economies, containing many of the core characteristics required for a digital economy.

Angola is transitioning from an oil-and-gas-based economy to a more diversified economy, focusing on a variety of sectors. Several national strategies are supporting entrepreneurship and innovation as drivers of job creation and economic development. Despite this, institutional capability and policies that encourage innovation are lacking. Furthermore, the level of bureaucracy remains high.

The Angolan entrepreneurial ecosystem is still in its infancy, despite a number of promising initiatives taking place, which have contributed to an increasing number of startups in the country.

The national Empretec host institution, Prestígio - Liga de Jovens Empresários e Executivos de Angola - signed an agreement with UNCTAD to coordinate the delivery of future Empretec training sessions in Angola. Empretec is a program established by the UNCTAD to promote the creation of sustainable, innovative, and internationally competitive SMEs.



With such initiatives, we believe startups will continue rising across Angola, capitalizing on the digital revolution to provide a significant boost to the economy.

# Notable Startups and Ecosystem Champions

#### Tupuca

#### Luanda, Angola

All-in-one delivery platform that allows users to order almost anything on-demand.

#### Jobartis

#### Luanda, Angola

Jobartis is a leading job board in Angola. It combines the main features of traditional job boards with African specifications.

#### Deya

#### Luanda, Angola

Deya is an Angolan and PALOP crowdfunding platform and aims to increase access to financing for social impact causes and entrepreneurs.

#### **Our Ecosystem Partner**





#### Somalia has decreased by 4 positions to rank 98th.



Somalia has decreased by 4 positions to rank 98th. It has maintained its rank at 4th in Eastern Africa, but dropped to position 14 in Africa and to position 21 in the Middle East & Africa region.

Mogadishu, the highest ranked city in Somalia, has decreased 197 spots to rank 764th globally. Mogadishu is ranked 7th in Eastern Africa, one spot lower than in 2021. Mogadishu is the only city from Somalia in the global top 1000 after Hargeisha dropped from the rankings this year.

ı	National Rank and Change	City	Global Rank and Change	Total Score	Overperforming Industry	п
	1 -	Mogadishu	764 <sup>-197</sup>	0.302		

For more information about the rankings of cities, view the country dashboard on Startupblink.com.

#### **Startup Ecosystem Overview**

Somalia has a population of almost 16 million people and is an example of innovation flourishing under tough economic circumstances. With some stability restored in the recent decade, Somalia has been working towards restoring itself as a regional hub for commerce, transportation, trade, and industry. We were inspired to see how the public sector, local entrepreneurs, and international organizations have worked hard to foster high quality innovations aimed at solving some of the country's biggest problems. Some of the stakeholders that helped set the

foundation for the startup scene include Response Innovation Labs, Somali Technology Association Centre, and the iRise hub.

As a country that finds itself on a major transformation path, Somalia has a number of reforms to tackle and several challenges to address. These challenges aren't only financial, but also have to do with building infrastructure and changing both the country's narrative and mentality when it comes to entrepreneurship. It is encouraging to see that amid all these challenges the <a href="IITE Institute">IITE Institute</a> has created an opportunity for the community to discuss the importance of a legal framework for startups.



We look forward to seeing how these reforms will be implemented in the coming years and the positive impact they will have on Somalia's startup scene.

# Notable Startups and Ecosystem Champions

#### Waafi App

Mogadishu, Somalia

WAAFI combines mobile money, communication, entertainment, and productivity in a unified app.

#### SoPay

Mogadishu, Somalia

SoPay is an all-in-one mobile money solution.

#### Ogow Health

Mogadishu, Somalia

Ogow Health offers an electronic medical records (EMR) and practical management system for hospitals in Somalia.

#### **Our Ecosystem Partner**





Please refer to the ecosystem case study section to read a <u>detailed analysis of Mogadishu's startup ecosystem</u>.



#### Kuwait has decreased by a significant 9 positions to rank at 99th.



Kuwait has decreased by a significant 9 positions to rank at 99th, and is ranked 8th in the Middle East. Kuwait City has seen a steep decrease of 256 spots to rank 736th globally, and ranks 22nd among cities from the Middle East after losing 6 spots.

п	National Rank and Change	City	Global Rank and Change	Total Score	Overperforming Industry	
	1 -	Kuwait City	736 <sup>-256</sup>	0.327		

For more information about the rankings of cities, view the country dashboard on Startupblink.com.

#### **Startup Ecosystem Overview**

Kuwait has a population of over 4 million people and borders Iraq and Saudi Arabia. The Kuwaiti startup scene is small and vibrant, with funding opportunities and commercial infrastructure to provide startup founders with a solid foundation in one of the most politically stable countries in the region. The startup scene is coming together as more ecosystem enablers such as Sirdab Lab and Startup Q8 rise. Moreover, the government established the National Fund, an independent public corporation that supports entrepreneurs and startups not only by financing their initiatives, but also by offering training and advisory services. In recent years,

the country embarked on a series of legislative reforms for the business sector, tackling the freedom of competition, financial obligations, and bankruptcy, as well as transparency and information rights.

However, there are still challenges when it comes to foreign investment, as the government imposes a number of restrictions. Considering that the nation has set the strategy Kuwait Vision 2035
"New Kuwait" with a clear objective of making the country more attractive to investment and diversify its oil dependent economy, we hope to see more reforms that create a favorable environment for business.



If Kuwait hopes to be an innovation hub in the region, the development of Kuwait City's startup ecosystem should be seen as strategic.

# Notable Startups and Ecosystem Champions

#### **⇒** Fiz

Kuwait City, Kuwait

Fiz is an on-demand grocery delivery service.

#### Floward

Kuwait City, Kuwait

Floward is an online flowers and gifts ecommerce solution.

#### Boutiquat

Kuwait City, Kuwait

Boutique offers cosmetics and beauty products for women in the Middle East.



# Kyrgyzstan enters the top 100 country ranking for the first year with a rank of 100th.



Kyrgyzstan makes its debut in the global startup ecosystem Index this year at 100th globally. It is ranked 2nd in Central Asia and 7th in the Central Asia Regional Economic Cooperation Program (CAREC) business region.

Bishkek made an impressive debut in the Index this year with a rank of 732nd. It is ranked 3rd in Central Asia, with a slightly higher score than Tashkent, Uzbekistan, the next highest city. Bishkek is ranked 47th in CAREC, a business region dominated by Chinese ecosystems. When not

considering Chinese cities, Bishkek is the 9th highest ranking city in the CAREC region.

п	National Rank and Change	City	Global Rank and Change	Total Score	Overperforming Industry	
	<b>1</b> new	Bishkek	732 <sup>new</sup>	0.333		

For more information about the rankings of cities, view the country dashboard on Startupblink.com.

#### **Startup Ecosystem Overview**

Kyrgyzstan's startup ecosystems show substantial potential. Kyrgyzstan has a strategic location, with access to both the market of the Eurasian Economic Union and China's ambitious One Belt-One Road initiative.

The national innovation support system has made some progress but requires more initiatives. The State Service for Intellectual Property and Innovation under the Government of Kyrgyzstan - Kyrgyzpatent - has the leading

role in public support for innovation.

Kyrgyzpatent organizes regular competitions, like Startup Kyrgyzstan, as well as other programs and projects aimed at the development of the startup community, startup competencies, and financing mechanisms.

In addition, there are initiatives such as the PEAK Business Innovation Centers, funded by the UK government to support the private sector in Kyrgyzstan and Tajikistan, the business accelerator Accelerate Prosperity, the John Galt business incubator, the acceleration program KG LABS (a public foundation for



startup development in Central Asia), and the High Tech Park.

The Kyrgyz Government is executing a program called Sanarip Kyrgyzstan (Digital Kyrgyzstan) that aims to build an open and transparent country with a knowledge-based economy, improving the overall business environment.

Although there are notable legislative attempts to improve scientific and academic research, more needs to be done to encourage higher education and research and development institutions to collaborate with the corporate sector.

Policymakers should focus on improving the national innovation system, strengthening the link between the various parts of the system, including foreign partners, and strengthening the capacities of enterprises to absorb and adapt technologies to fully realize Kyrgyzstan's potential for innovation-led sustainable development.

# Notable Startups and Ecosystem Champions

#### Mashina.kg

#### Bishkek, Kyrgyzstan

Mashina.kg provides quality assistance in selling cars in Kyrgyzstan by placing ads on websites and applications.

#### Bookit

#### Bishkek, Kyrgyzstan

A website to get cheap flights in Kyrgyzstan.

#### Growave

#### Bishkek, Kyrgyzstan

Growave is an All-in-One Marketing Platform for Shopify (5 Apps Rolled Into 1) that empowers businesses to focus on the bigger picture of their marketing strategy, resulting in more effective and meaningful engagement with their customers.

**Our Report Partner** 

STARTUP. NATION

# **Contender Ecosystems**

In this section we present countries with seed ecosystems that have not managed to secure a place in the top 100 countries, but are well positioned to do so next year.

We also present the ecosystem rankings of the cities in those countries, some of which are already represented in the top 1000 cities rankings. These ecosystems are swaying between solidifying their position in the rankings and losing the critical mass that allows for a growing startup ecosystem. It is up to their local governments to give them a push in the right direction by supplying resources and support.

Country	City	Rank	Total Score
Algeria			
	Algiers	771	0.299
Bolivia			
	Santa Cruz de la Sierra	>1000	0.094
	La Paz	>1000	0.084
Cambodia			
	Phnom Penh	697	0.378
Cameroon			
	Yaounde	>1000	0.101
	Douala	>1000	0.092
	Buea	>1000	0.061
Dominican Republic			
	Santo Domingo	751	0.317
El Salvador			
	San Salvador	>1000	0.152
Ethiopia			
	Addis Ababa	489	0.764
	Jimma	>1000	0.035
Guatemala			
	Guatemala City	832	0.245
Iran			
	Tehran	634	0.466
Iraq			
	Erbil	941	0.183
	Baghdad	>1000	0.077

Country	City	Rank	Total Score
Ivory Coast			
	Abidjan	664	0.424
Myanmar			
	Yangon	545	0.614
Nepal			
	Kathmandu	529	0.640
Tanzania			
	Dar es Salaam	583	0.532
Uganda			
	Kampala	462	0.855
Uzbekistan			
	Tashkent	746	0.321
Venezuela			
	Caracas	629	0.471
Zambia			
	Lusaka	734	0.332
Zimbabwe			
	Harare	>1000	0.111

As for the cities of non ranked countries, Kampala (Uganda) and Addis Ababa (Ethiopia) are the most successful ecosystems on this list, ranking 462nd and 489th respectively. These two cities put their countries in a very good position to enter the top 100 list next year, especially if new cities from these countries also emerge in the coming year. Algeria deserves credit this year, as the capital city of Algiers booked the biggest yearly improvement among all ecosystems on the table, with an impressive jump from position 984 in 2021 to position 771 in 2022. If this trend continues, Algeria may become a serious contender for the top 100 countries list.

It is also worth noticing the ecosystem of Dar es Salaam (Tanzania), which now ranks 583rd globally after realizing an improvement of no less than 141 positions since 2021.

Also, the ecosystems of Lusaka (Zambia) and Tashkent (Uzbekistan) have realized significant improvements since 2021. They are now ranked 734th and 746th worldwide, an improvement of 143 positions and 136 positions respectively.

#### Our Ecosystem Partner in Uganda



## **Countries Ecosystem Variety**

#### Rankings by total number of cities

In some countries, entrepreneurial innovation is centered in one or a few cities. In other countries, innovation is widespread across many cities and regions. Often, the latter is a sign of a more robust, mature startup ecosystem. Aiming to find and highlight these countries, we investigated the number of cities ranked in the global top 1000 in each of the 100 countries included in this report. We provide a table below showing these top 10 countries. Next, we investigated how these cities are distributed across the various tiers in our rankings:

- 1. cities ranked between 1st and 30th,
- 2. cities ranked between 31st and 100th,
- 3. cities ranked between 101st and 300th, and
- 4. cities ranked between 301st and 1000th.

It should be clearly noted that countries with vast populations such as China, India, and Brazil would be expected to generate more cities in the rankings compared to countries with low populations such as Israel and Estonia.

Without much surprise the US is an undisputed leader, with 257 cities in the top 1000. The numbers have changed a bit since last year due to city clustering, but if we include the total number of cities below the top 1000, US presence continues to grow as smaller US cities register increased seed startup activity.

Spain, Canada, and the UK deserve credit, as these countries all managed to bring more cities into the Index, reflected by an impressive growth of 39%, 37%, and 34% respectively in the total number of ranked cities.

Looking at the table below, Germany and India appear to have lost position but this is not the case, as the decline in their numbers is primarily due to city clustering. Brazil, however, can't blame its drop on clustering; eight Brazilian cities that ranked in 2021 dropped out of the rankings this year, and no new cities replaced them.

Also, the aggregate percentage of cities coming from the top 10 countries in the Index has grown from 59.8% to 62.3%, implying that these countries are becoming even more influential in relation to the rest of the world.

Above all, it's important to note that the number of ranked cities does not guarantee a high national rank. In fact, four notable countries in the list are not included in the global top 10: Spain (ranked 16th), India (19th), Brazil (26th), and Italy (31st). These observations suggest a lower Quality within a larger number of ecosystems. This Quality is reflected by the tier in which these cities are ranked. For example, the US (ranked 1st in the table) is overrepresented in the top tier, with 11 cities (the global top 30), while the UK (ranked 2nd in the table) has only one city in this tier.

Some other countries in the global top 10 do not have enough ecosystems to be represented in the table below. These are Israel (ranked 3rd, but only 16th in the number of ranked city ecosystems), Sweden (ranked 5th; and 12th in the number of ranked city ecosystems), Australia (ranked 8th; and 14th in the number of ranked city ecosystems), and Singapore (ranked 7th worldwide, with only one city ecosystem). These countries demonstrate that while Quantity is important, Quality is paramount to success.

When looking for the most centric ecosystems in the top 10 countries, it is interesting to identify those who have an ecosystem in a high tier, but no ecosystems in the next tier. This worrying situation is happening in 2 countries, France and Brazil, where both Paris and São Paulo are ranked in the highly competitive top 20, while no other city has even made it to the top 100. Those countries should emulate the United Kingdom, which in 2019 had only Manchester ranked in the top 100 (in addition to London in the top 10), and now has no less than 5 cities joining London in the top 100.

The table below provides a ranking based solely on Quantity; in other words, the 10 countries with the most cities in the global top 1000.

#### Number of cities per tier

Rank	Country	Total	% of Top- 1000	#1–30	#31–100	#101–300	#301–1000	
1	United States	257	25.7%	11	24	55	167	2022
	United States	267	26.7%	12	24	45	186	2021
2	United Kingdom	78	7.8%	1	5	13	59	2022
	United Kingdom	58	5.8%	1	4	11	42	2021
3	China	44	4.4%	4	3	11	26	2022
<b>.</b>	Cnina	40	4.0%	3	4	8	25	2021
4	Canada	41	4.1%	1	4	8	28	2022
	Canada	30	3.0%	1	3	8	18	2021
5	Germany	39	3.9%	1	2	13	23	2022
		42	4.2%	1	3	11	27	2021
6	Spain	39	3.9%	0	2	2	35	2022
	эраш	28	2.8%	0	2	6	20	2021
7	India	37	3.7%	3	2	4	28	2022
	IIIGIA	43	4.3%	3	0	10	30	2021
8	Italy	34	3.4%	0	1	2	31	2022
	italy	34	3.4%	0	1	4	29	2021
9	France	30	3.0%	1	0	10	19	2022
	i ialice	24	2.4%	1	0	10	13	2021
10	Provil	24	2.4%	1	0	4	19	2022
10	Brazil	32	3.2%	1	0	5	26	2021

#### Rankings by total number of cities per capita

While the analysis shown above is fascinating by itself, its disadvantage is that it provides an inherent advantage to large countries and does not reflect a country's performance in relation to population size. If we adjust rankings based on population size, the results change significantly.

In the following table, we include countries sorted by the number of ranked cities per million people. We have set the minimum number of cities to 5 to avoid skewing the results to very low population countries. The top 7 countries all have a population between 5 and 10 million (only Sweden's population is slightly above 10 million). Only the Netherlands, the UK, and Canada (ranked 8th, 9th, and 10th respectively) have significantly larger populations.

The UK ranking in this top 10 with 67 million inhabitants is impressive (at the same time the US falls short of making it to the top 10 despite managing to get there last year).

#### Number of cities per capita

Rank	Country	Number of cities	Cities per million	Population	
1	Sweden	21	2.06	10.2	2022
	Sweden	10	0.97	10.3	2021
2	Switzerland	17	2.00	5.3	2022
	Switzeriand	14	1.63	5.3	2021
3	Norway	9	1.70	4.9	2022
<b></b>	Norway	4	0.75	4.9	2021
4	Finland	9	1.64	9	2022
<b>-</b>	riniano	6	1.09	9.1	2021
5	Ireland	8	1.63	66.8	2022
		6	1.22	66.8	2021
6	New Zealand	8	1.63	11.4	2022
	New Lealand	4	0.82	11.5	2021
7	Israel	13	1.44	47	2022
	131461	11	1.21	47.1	2021
8	The Netherlands	23	1.33	328.2	2022
	The Netherlands	22	1.27	328.2	2021
9	United Kingdom	78	1.17	25.3	2022
	Onited Kingdom	58	0.87	25.4	2021
10	Canada	41	1.09	9.7	2022
10	Canada	30	0.80	9.8	2021

Sweden's story deserves some extra attention. In 2021, Sweden was the 8th best country in terms of the number of cities per capita, with 0,97 cities per million inhabitants. This year, Sweden more than doubled (!) the number of its ranked cities, after seed activity has been recorded in many cities that have been unranked before. This resulted in Sweden's overall climb to the position of the 5th best country for startups in the world, and a significant increase in Sweden's score measuring the number of ranked cities per million inhabitants: from 0.97 in 2021 to more than 2 in 2022.

A further observation of the number of ranked cities per capita in 2022 versus 2021 shows how competitive the global startup scene is becoming. In 2021, the country with the highest number of cities per capita, Switzerland, had 1.63 cities per million inhabitants. This year, Sweden tops the list with 2.06 cities per million inhabitants. Similarly, in 2021, a score of 0.81 cities per million inhabitants sufficed for the US to enter the top 10 of this list, whereas in 2022, Canada, ranked 10th, has a much higher score of 1.09, and a score of 0.81 would only rank 14th.

Another interesting observation relates to differences among continents. Seven of the world's ten countries with the highest number of ranked cities per capita are European. New Zealand, Israel, and Canada are the only non-European countries among the top 10. An even stronger European dominance is seen in positions 11-20 in this list (not included in the table here), where eight of the 10 positions are occupied by European countries. Asia, Africa, and Latin America are not represented in these ranks, showing how the startup scenes in Europe, North America, New Zealand, Australia, and Israel are more geographically widespread across the country, whereas the startup scene in Asia, Africa, and Latin America is more concentrated around fewer large startup ecosystems.

For detailed coverage of the Top 100 countries and 1000 cities, with tools for customizable analysis of their startup ecosystems, subscribe to a <u>StartupBlink Pro account</u>.

# **Top Island Cities**

With the recent and massive shift to remote work, many IT professionals and digital nomads are looking for exotic locations to build new companies and work from. In this section, we focus on locations that are probably on everyone's dream list: Islands.

We will present the top startup ecosystems on Islands that have managed to transition their economy from dependence on tourism to building innovative startups while attracting foreign talent in the process.

Here are the top ranked 15 ecosystems in islands with a population of under 1 million.

First place has been taken by the Canadian island city of Victoria, ranking 184th in the global top 1000, with an improvement of 9 positions since 2021. In second place we have Iceland's capital Reykjavik. It has improved its position globally from 221 in 2021 to 209, slightly narrowing the gap with Victoria.

Third place belongs to the Canadian city of Saint John's in Newfoundland. Last year it was ranked 563rd, but this year it managed to rank even higher thanks to good Business and Quality scores.

Fourth place is occupied by Honolulu, US, which holds the 294th position worldwide. 5th place is taken by Nassau in the Bahamas, which secured the 313th spot thanks to the decision by the cryptocurrency exchange FTX to headquarter in the country, and new recognition as a Pantheon member. Ranked 6th is Valletta, capital city of Malta, which now ranks 354th, an improvement of 18 positions since 2021.

Down the line we encounter 2 Spanish cities, Las Palmas and Tenerife, in the beautiful Canary Islands. The list also includes 2 cities from Cyprus (Limassol and Nicosia), Cayman Islands (George Town-UK), Isle of Man (Douglas), Palma de Mallorca (Mallorca), Jersey (Saint Hellier), and Bermuda (Hamilton).

Comparing this year's rankings of the top 15 island cities to 2021 reveals an interesting fact about the increasing competitiveness of the Island ecosystems. This year, all top 15 island ecosystems are ranked in the top 500 globally. Last year, some of those top 15 island ecosystems were ranked much lower. A special honorable mention is also due for Praia, Cape Verde, representing the islands on the coast of Africa, which improved its ranking from 624th in 2021 to 606th in 2022.



#### **Top Island Cities**

Island Rank	Global Rank	City	Island	Country/ Territory	City Population Range
1	184	Victoria	Vancouver Island	Canada	300k - 1M
2	209	Reykjavik	Iceland	Iceland	100k - 300k
3	247	Saint John's	Newfoundland	Canada	Below 100k
4	294	Honolulu	Oahu	United States	300k - 1M
5	313	Nassau	New Providence	The Bahamas	300k - 1M
6	354	Valletta	Malta	Malta	Below 100k
7	360	Las Palmas de Gran Canaria	Gran Canaria	Spain	300k - 1M
8	372	Santa Cruz de Tenerife	Tenerife	Spain	300k - 1M
9	379	Limassol	Cyprus	Cyprus	100k - 300k
10	397	George Town	Grand Cayman	Cayman Islands	Below 100k
11	402	Nicosia	Cyprus	Cyprus	100k - 300k
12	418	Douglas	Isle of Man	Isle of Man	Below 100k
13	420	Saint Helier	Jersey	Jersey	Below 100k
14	466	Palma de Mallorca	Mallorca	Spain	300k - 1M
15	493	Hamilton	Bermuda	Bermuda	Below 100k

Explore the full list of Island ecosystems, using the <u>StartupBlink Pro Data</u>.

# City Ranking by Population

For reasons mentioned in the methodology chapter, our city rankings measure innovation without considering population size. In the section below, we divide the cities into tiers by their population size to show how cities rank against each other in the same weight category.

This segmentation helps identify cities that are punching above their weight, with relatively small populations and outstanding global rankings, whose achievement might otherwise be overlooked.

Without adjustments to population size, it's obvious that larger cities will generally outshine the smaller ones. This becomes evident when looking at the cities with population of more than 10 million in our rankings. 39 cities in this population tier are ranked in the top 1000. As many as 25 of these 39 are ranked in the top 100, showing that overall, large cities often rank higher. Similarly, eight of the world's top 10 ecosystems are cities in the population tier of above 10 million.

That said, two cities in the global top 10 have a population of less than 10 million, Boston and Tel Aviv, and their positions have been pretty stable for several years now. Overall, the top 100 city ranking includes 25 cities with population over 10 million, 35 cities with 3-10 million, and 26 cities with 1-3 million. At the 300k to 1 million population tier, we only see 8 cities in the top 100 (led by Boulder, US and Tallinn, Estonia). For 100-300k it's only 4, and all of them are either from the US (Wilmington and Louisville) or UK (Cambridge and Oxford). Finally, we see two cities of less than 100k population which still managed to reach the top 100: Santa Barbara (US) at 84th place and Burlington (US) at 87th; this is a considerable achievement because Santa Barbara has been in the top 100 since 2020. Burlington joined this elite club this year, after improving its ranking 28 positions since 2021.

Unsurprisingly, the US dominates the top 10 lists in most population tiers. The US hegemony is disrupted in the population tier between 100,000 and 300,000, where six of the top 10 cities are European (led by Cambridge and Oxford), versus four US cities. Similarly, in the population tier between 1 million and 3 million, five of the top 10 cities are European (led by Stockholm and Amsterdam), versus four US cities.

Analysis at a granular level of all countries and cities by population tier, is available for <u>StartupBlink PRO</u> users.

#### Cities with population greater than 10 million

Tier Rank	City	Country	Global Rank	Rank Change (from 2021)	Total Score
1	San Francisco Bay	United States	1	-	550.270
2	New York	United States	2	-	217.000
3	London	United Kingdom	3	+2	125.640
4	Los Angeles Area	United States	4	-	113.860
5	Beijing	China	6	-3	102.700
6	Shanghai	China	7	-	70.620
7	Bangalore	India	8	+2	63.280
8	Paris	France	10	+1	52.880
9	Seattle	United States	11	+1	51.970
10	New Delhi	India	13	+1	43.040

#### Cities with population between 3 million and 10 million

Tier Rank	City	Country	Global Rank	Rank Change (from 2021)	Total Score
1	Boston Area	United States	5	+1	108.050
2	Tel Aviv Area	Israel	9	-1	54.890
3	Berlin	Germany	12	+1	48.360
4	Washington DC Area	United States	19	-	34.960
5	Austin	United States	20	-2	32.910
6	San Diego	United States	21	+1	32.560
7	Singapore City	Singapore	22	+3	32.280
8	Toronto	Canada	24	+2	31.270
9	Dallas-Fort Worth	United States	26	+1	29.35
10	Atlanta	United States	28	-	26.53

#### Cities with population between 1 million and 3 million

Tier Rank	City	Country	Global Rank	Rank Change (from 2021)	Total Score
1	Stockholm	Sweden	23	+1	31.270
2	Amsterdam	The Netherlands	27	+2	26.810
3	Salt Lake City - Provo Area*	United States	31	new	24.710
4	Denver	United States	34	-4	24.040
5	Raleigh Durham	United States	41	-1	18.650
6	Montreal	Canada	45	+1	15.080
7	Dublin	Ireland	46	+5	15.050
8	Helsinki	Finland	48	-4	14.800
9	Copenhagen	Denmark	53	+8	13.150
10	Portland	United States	54	-1	12.150

#### Cities with population between 300 thousand and 1 million

Tier Rank	City	Country	Global Rank	Rank Change (from 2021)	Total Score
1	Boulder	United States	55	+4	11.450
2	Tallinn	Estonia	62	+4	10.300
3	Columbus	United States	64	+11	10.120
4	Charlotte	United States	73	-15	9.210
5	Vilnius	Lithuania	80	+4	8.440
6	Jerusalem	Israel	86	-32	8.070
7	Kitchener Waterloo	Canada	91	+10	7.920
8	Edinburgh	United Kingdom	96	+6	7.680
9	Lexington	United States	105	+65	6.970
10	Basel	Switzerland	107	-14	6.770

<sup>\*</sup> This year, we clustered Salt Lake City and Provo into one ecosystem in our rankings. In 2021, Salt Lake City ranked 55th, and Provo ranked 79th.

#### Cities with population between 100 thousand and 300 thousand

Tier Rank	City	Country	Global Rank	Rank Change (from 2021)	Total Score
1	Cambridge	United Kingdom	63	+13	10.220
2	Wilmington	United States	79	+16	8.460
3	Oxford	United Kingdom	95	-3	7.700
4	Louisville	United States	98	+62	7.450
5	Lausanne	Switzerland	109	-13	6.700
6	Porto	Portugal	136	-16	5.380
7	Valencia	Spain	159	-13	4.910
8	Greenville	United States	162	+150	4.820
9	Birmingham- Hoover	United States	169	+42	4.730
10	Luxembourg City	Luxembourg	175	+11	4.620

#### Cities with population below 100 thousand

Tier Rank	City	Country	Global Rank	Rank Change (from 2021)	Total Score
1	Santa Barbara	United States	84	-10	8.235
2	Burlington	United States	87	+28	8.043
3	Zug	Switzerland	121	+45	5.790
4	Bend	United States	151	-8	5.104
5	Sankt Gallen	Switzerland	193	+11	4.332
6	Chatham	United States	210	+294	3.865
7	Princeton	United States	230	-24	3.471
8	Charlottesville	United States	246	+112	3.029
9	Bellingham	United States	262	+542	2.711
10	Bentonville	United States	276	+268	2.438

Further explore startup ecosystems by population, using the **StartupBlink Pro Map**.



The section offers an alternative view of the Index, with iterations simulating other scenarios using new or specific data sets.

We start with a new alternative rankings showing the country rankings by absolute power without adjusting the results for population. We later continue to a subscore analysis of the countries, where we check what would be their rankings when we isolate each of the 3 integrated baskets of the Index (Quantity, Quality, Business).

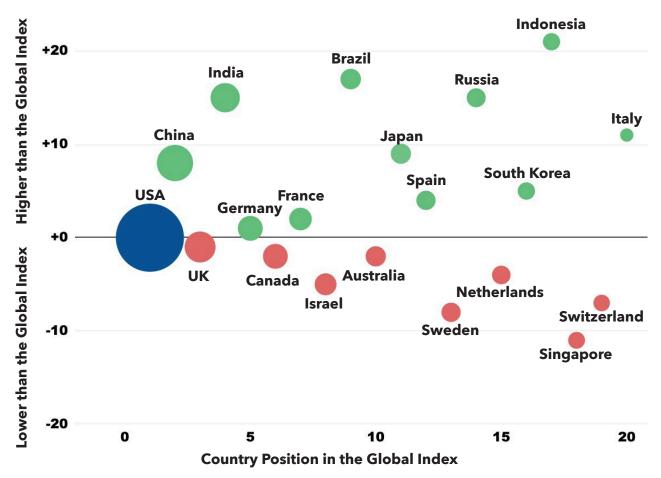
We later do an interesting analysis of the rankings of the cities by 11 startup industries.

Our last alternative Index is checking the rankings of both countries and cities taking into consideration their special entities (Unicorn, Exits, Startup Pantheon club members, and global startup influencers).

# Country Rankings by Absolute Power

We introduce this section for the first time this year to present the alternative ranking of countries when not considering their population size.

As explained in the Methodology chapter, our country scores take into account population size, ensuring that performance is assessed based on achieved results in relation to what could be expected based on population size. Thus, given certain results achieved by a country, our scoring algorithm adjusts the country's score based on its population size, so that a true picture of its relative performance is created, which can be compared with other countries independently of their size. By doing so, a coherent measurement of the global startup economy is captured, irrespective of the size of countries.



Bubble size represents absolute ecosystem strength, i.e. before adjustment for population size.

When ranked by absolute ecosystem strength, i.e. without adjusting scores based on population size, countries with bigger populations such as China, India, Brazil, Japan, Russia, and Indonesia rank significantly better than in the Index, as expected. The US, which ranks 1st in the global Index ranks 1st here too, demonstrating the US's startup economy in absolute terms is significantly bigger than China and India.

The UK which ranks 2nd in the global Index is ranked just one spot below in this ranking at 3rd, ahead of countries with bigger populations such as India, Germany, and Japan.

China is ranked 2nd in this ranking and 10th in the Index, showing the massive amount of innovation happening there. India ranks 4th here (with a very small gap from the 3rd ranked United Kingdom), while it is ranked 19th in the Index. The biggest overperformers in the top 10 of these rankings are Brazil (9th) and Indonesia (17th) which ranked 17 and 21 spots respectively better compared to the Index. In absolute terms, Indonesia ranks better than neighbor Singapore by 1 rank, while in the Index it is ranked 31 spots below Singapore. This shows the strength of the Singapore startup economy, that despite its small population, manages to achieve results that are comparable - in absolute terms - to Indonesia's results.

Unsurprisingly, top 20 countries in the Index who have relatively smaller populations such as Israel (8th in this alternative ranking), Sweden (13th), the Netherlands (15th), Singapore (18th) and Switzerland (19th) register lower rankings when looking at absolute terms, compared to their position in our global startup ecosystem Index. But this is by no means a sign of weakness. On the contrary, these countries rank higher than many countries with much greater populations, showing the strength of the startup economy in these countries. In fact, for a country with less than 10 million inhabitants to rank 8th worldwide in absolute terms, is nothing but a great achievement. Congratulations, Israel!

# Rankings by Subscores

# This chapter provides an alternative lens to examine the data by analyzing country ranks based on subscores.

The total score of national ranking score is composed of three components: Quantity (how much activity), Quality (the results of this activity), and Business Environment score (the startup related infrastructure). In this section, we will dive into what rankings would look like if we considered each score component individually. Looking at individual score components reveals interesting insights about the strengths and weaknesses of ranked countries.

For a detailed description of each subscore and its components, please refer to our methodology chapter. Analysis at a granular level and full tables of all countries and cities is available for <a href="StartupBlink PRO">StartupBlink PRO</a> users.



For a full breakdown of Countries by Quality, Quantity and Business Score, explore StartupBlink Pro.

#### **Top 10 Countries by Quantity Score**

Rank	Country	Overall rank	Quantity Score
1	United States	1	27.56
2	United Kingdom	2	12.66
3	Canada	4	9.40
4	Israel	3	7.10
5	Switzerland	12	6.19
6	Australia	8	5.95
7	Spain	16	5.71
8	Germany	6	4.96
9	France	9	4.82
10	Sweden	5	4.68

# QUANTITY SCORE SCORE

The United Stated and the United Kingdom are ranked first and second by Quantity score, with a noticeable gap between them.

Canada and Israel exchanged their places in Quantity, showing that the Canadian ecosystem logs more activity than Israel, but does not match up on Quality.

The same can be said for Switzerland, Ranked 5th on Quantity, with a substantial gap from its overall rankings at 12th.

Two additional countries that perform better on their Quantity score (activity level) than their overall rankings are Australia (ranked 6th on quantity and 8th overall), and Spain, which registers a massive gap between its Quantity (6th) and overall rankings (16th).

On the flip side, both Germany and Sweden in the top 10 have reduced Quantity scores compared to their overall ranking, showing the Quality of the results of those ecosystems compared to a lower level of activity.

A few additional countries are performing much better on their Quantity score than overall score, including Lithuania (ranked 13th compared to 17th overall), Italy (ranked 19th compared to 31st overall), Bulgaria (ranked 27th compared to 36th overall), and Serbia (ranked 38th compared to 52nd overall).

The few reverse examples of countries with relatively low Quantity scores compared to their overall score can be seen in Singapore (ranked 15th compared to 7th overall), China (ranked 29th compared to 10th overall) and South Korea (ranked 34th compared to 21st overall).

This also reveals a deeper insight regarding the low level of activity in Asian countries compared to their outstanding rankings.

This could be the product of two different factors. The first is the relatively low popularity of entrepreneurship in Asian countries, which reduces Quantity score. The second is a low diffusion of information about Asian startups on global platforms (such as StartupBlink and Crunchbase), indicating that Asian founders tend to be more focused on national and regional traction than global collaboration.

#### **Top 10 Countries by Quality Score**

Rank	Country	Overall rank	Quality Score
1	United States	1	164.15
2	United Kingdom	2	36.10
3	Israel	3	34.82
4	Canada	4	22.35
5	Sweden	5	20.03
6	Singapore	7	17.18
7	Germany	6	16.84
8	China	10	16.04
9	Australia	8	12.86
10	France	9	12.77



All countries ranking in the Quality top 10 are also in the overall top 10, reflecting the substantial influence of results on our Index. The first five countries align perfectly with their overall ranking, although we should note that the quality gap between the United Kingdom and Israel is relatively small compared to their total score gap. In the top 10, China is ranked 8th on quality compared to 10th overall, yet it registered a decline in this parameter; in 2021 it ranked 4th worldwide for Quality.

The Quality score is the main reason China managed to remain in the overall global top 10, compared to its score on both Quantity and Business where it ranks 29th and 35th respectively.

Singapore overperforms its overall ranking, ranked 6th in Quality compared to 7th overall. Germany, on the flip side, slightly underperforms at 7th place for Quality and 6th overall. Australia and France, ranked 9th and 10th respectively for Quality subscores, are slightly underperforming on this parameter compared to their overall rank.

Seeing that the Quality subscore is highly influential, it's no surprise that deeper in the rankings there are not many large gaps between Quality and overall ranking. The most noticeable overperformers in Quality score are India, ranking 16th versus 19th place overall, Mexico at 32nd place for Quality and 35th overall, and Nigeria, placing 52nd for Quality and 61th overall. Spain, however, underperforms in this category, ranking 5 places lower for Quality at 21st than its overall rank of 16th.

#### **Top 10 Countries by Business Score**

Rank	Country	Overall rank	Business Score
1	Sweden	5	3.80
2	United Kingdom	2	3.79
3	Denmark	18	3.69
4	Finland	14	3.68
5	United States	1	3.66
6	Australia	8	3.64
7	New Zealand	30	3.59
8	Switzerland	12	3.57
9	Germany	6	3.53
10	Canada	4	3.51

# BUSINESS SCORE

The Business score can be a standalone decision-making tool, and a way to evaluate how ready a country is to accommodate startup growth. A good Business score does not guarantee a good startup ecosystem, but it will create the conditions for startup ecosystems with good Quantity and Quality scores to grow faster in the future. A great Business score highlights a place attractive for startups, a place where entrepreneurs know that they can focus on what they do best without worrying too much about infrastructure, bureaucracy, or administrative overhead.

As our Index is focused mainly on measuring the results of a good ecosystem, there are wide gaps between Business score rankings and the overall results for each ecosystem, especially for those ecosystems with high total scores that are ranked near the top and mainly influenced by Quality score. This explains why 4 countries in the top 10 Business score ranking are not ranked in the overall top 10: for instance, New Zealand places 7th for Business score, yet only ranks 33rd for Quantity, 30th for Quality, and 30th overall.

The top 10 list is led by Sweden and the UK, ranked 2nd and 3rd respectively in 2021.

Sweden demonstrates how a small country can score extremely well in the global arena, offering a business friendly environment for startups to thrive. Denmark and Finland, rank 3rd and 4th in 2022 versus 6th and 7th in 2021, strongly overperform on Business score. Next, the US, which was ranked 1st for Business score in 2021, dropped to 5th in 2022. Australia enters the top 10 list in 2022 at 6th, followed by New Zealand at 7th. Switzerland, Germany, and Canada close the top 10 list. Canada, ranked 10th for Business, underperforms compared to its overall rank at 4th, showing that there is still room to improve the Canadian business environment. Australia (6th) and Germany (9th) are the new entrants to this list in 2022, at the expense of Norway and Austria, which ranked 5th and 10th respectively in 2021.

By reviewing Business scores as described above, we see many more differences between the Business rank of countries compared to their overall score. Ireland, ranked 11th place, is ahead of its overall rank by 4 positions. Ranked slightly lower is Austria, at 16th, and overperforming its 23rd overall ranking by 7 places. The other notable achievements include Latvia, ranked 22nd in Business score versus 43rd overall, Poland at 24th place versus 33rd overall, and Croatia at 28th, overperforming its 45th overall rank by 17 positions. However, we also have some underperformers in Business score, ranked much higher overall. The most prominent is Israel, whose Business score ranking is significantly behind its 3rd position overall, at 18th, showing that the startup nation has succeeded although, and not because of, its public sector policies and investments. Other underperformers would be China, ranked 35th as opposed to 10th overall, Spain at 33rd place versus 16th overall, Russia at 37th versus 29th, and Brazil, underperforming in its Business score by 22 spots and ranking 48th, compared to its 26th overall spot.

The Business score can be predictive, considering it lays the groundwork for growth. Our advice to those countries underperforming in Business score would be to invest more in the improvement of their business environments, mainly in reforming regulation, removing red tape, and unnecessary regulation, and improving infrastructure.

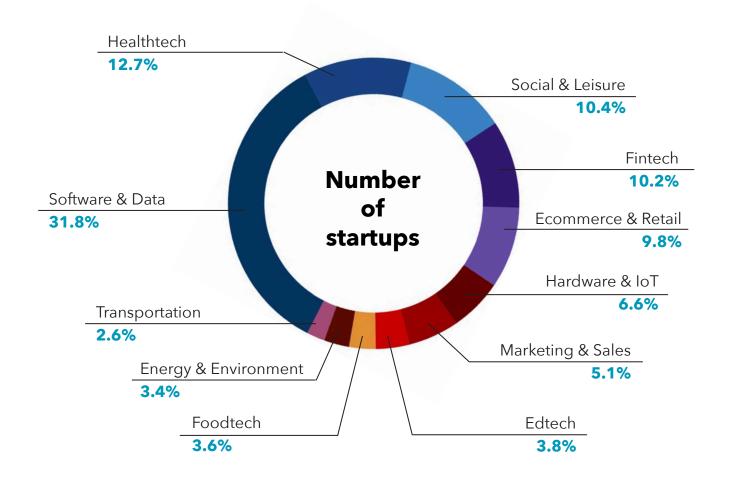
# **Industry Analysis and Rankings**

# In this section we introduce insights focused on the 11 major startup industries appearing on the StartupBlink map.

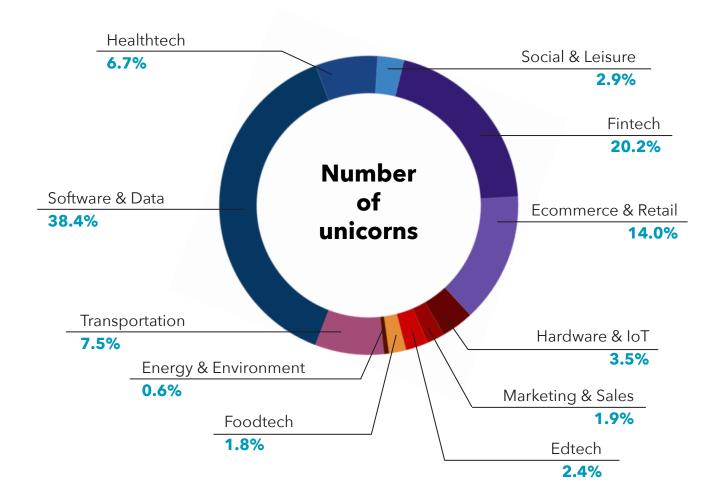
We then present the top ranked cities in each of these industries, sharing insights on city performance across each industry and comparing it to their overall performance which takes into account all industries combined. Please refer to the methodology section for elaboration on how the Index takes each specific industry into account.

#### **Startup Industry Analysis: Global Status**

Based on a sample of more than 100,000 entities on the StartupBlink map, we can pinpoint interesting trends related to core startup industries in regards to their activity level (number of startups) and scalability level (number of unicorns). The biggest industry remains Software & Data, with 31.8% of our sampled startups. The Unicorn count in this industry also increased substantially, from 255 Unicorns in 2021 to 415 Unicorns in 2022.



A sudden burst of activity in Healthtech has given it the second highest number of startups, with 12.7% of our sampled data in this category. The Healthtech industry now registers 73 Unicorns, almost doubling its count in 2021. It seems COVID-19 has inspired many entrepreneurs to give renewed focus to this critical industry. The Social & Leisure industry represents 10.4% of total startups, but has only managed to create 31 Unicorns.



Industries that demonstrate a better ability to scale are the Fintech and Ecommerce & Retail industries, each pertaining to roughly 10% of the startup sample, and generating 219 and 152 Unicorns respectively. Fintech has nearly doubled its Unicorns count since last year.

The rest of the industries lag behind in both representation in the sample and in unicorn count. The most interesting of those industries is Transportation, which has just 2.6% of the sample, but managed to produce 81 Unicorns. Rankings by the number of Unicorns would place the Transportation industry 4th despite the relatively small number of startups in this field, showing the massive scaling potential of this industry. Analysis at a granular level of all Industries, by country and city, is available for <a href="StartupBlink PRO">StartupBlink PRO</a> users.

#### **Startup Industry Rankings: Top Cities**

As shown above, StartupBlink categorizes startups in 11 different industries<sup>1</sup>. Below, we present a detailed review of the top 30 cities for each industry (more data available to PRO Users), with the exception of Fintech, for which we show the top 15. This analysis is important, since there is a gap between the overall performance of cities and in their industries of focus. Startup founders interested in relocating to another ecosystem should pay close attention to the Index ranking of their relevant industry when making such decisions.

2022 is the second year we have performed industry rankings; we are now able to analyze the gap between specific industry rankings and overall rankings, as well as examine the momentum of each city compared to last year.

It should be noted that creating industry rankings is not a straightforward task because most startups can be categorized in more than one industry simultaneously. StartupBlink considers this Industry ranking process to be a beta version, with less accuracy than our overall startup Index.

Firstly, it is interesting to note that San Francisco has regained the 1st place in every single startup industry in 2022 (last year leadership in Foodtech belonged to New York). Showcasing the dominance of San Francisco as a generalist startup ecosystem across all industries, no other city has managed to secure a place in the top 10 of all industries.

<sup>&</sup>lt;sup>1</sup> The scale of total scores for top ranked cities is higher in industries that have more activity, as there is more data taken into account in our calculations.

## **Ecommerce & Retail Rankings**



Industry Rank	City	Country	Rank Difference from Global	Total Score
1	San Francisco Bay	United States	_	202.14
2	New York	United States	_	145.95
3	Los Angeles Area	United States	+1	127.43
4	Beijing	China	+2	95.60
5	Shanghai	China	+2	73.73
6	London	United Kingdom	-3	67.94
7	Boston Area	United States	-2	58.51
8	Paris	France	+2	57.14
9	Berlin	Germany	+3	48.83
10	New Delhi	India	+3	48.31
11	Shenzhen	China	+7	41.94
12	Bangalore	India	-4	38.94
13	São Paulo	Brazil	+3	38.22
14	Singapore City	Singapore	+8	37.88
15	Seattle	United States	-4	36.68
16	Chicago	United States	-2	36.09
17	Jakarta	Indonesia	+15	34.95
18	Seoul	South Korea	+7	33.36
19	Hangzhou	China	+11	32.21
20	Philadelphia	United States	+15	25.02
21	Barcelona	Spain	+16	24.12
22	Moscow	Russia	+7	23.91
23	Austin	United States	-3	23.03
24	Hong Kong	China	+12	23.01
25	Amsterdam	The Netherlands	+2	22.07
26	Mumbai	India	+2	20.91
27	Atlanta	United States	-3	20.27
28	Toronto	Canada	+31	18.77
29	Detroit	United States	+1	18.65
30	Tel Aviv Area	Israel	+7	18.11

#### **Ecommerce & Retail Rankings**



San Francisco is an indisputable leader in Ecommerce & Retail Technology, followed by two additional US cities: New York and Los Angeles. Overall there are 10 US cities in the top 30, and along with the three cities above, Boston has managed to enter the top 10, capturing the 7th place.

In 4th and 5th place are the Chinese cities of Beijing and Shanghai, with China having 5 cities in the top 30. Shanghai overtook London, which dropped from 5th to 6th. Yet the most interesting insights are derived from comparing the 2022 scores with 2021: San Francisco's dominance is decreasing at a rapid rate. Last year, San Francisco's score was 96% and 130% better than the scores of the cities at 2nd (Los Angeles) and 3rd (New York). This year, San Francisco's score is only 38% and 58% better than its closest competitors. Also, cities ranked lower are closing the gap, including Beijing, Shanghai, and London.

The biggest overperformer relative to its global rank is Detroit, US, registering 29th place in Ecommerce & Retail, 28 places better than its overall ranking. In Asia, Jakarta shows strong industry overperformance at 17th, 15 spots higher than its overall ranking. The best European overperformer is Barcelona, ranked 21st, overperforming by 16 spots. Conversely, Tel Aviv underperforms its global position by 21 places.

As for the momentum of industry rankings this year, Moscow dropped by a significant 12 places, while Toronto demonstrated a substantial jump of 31 positions to 28th in this industry.

Further explore startup ecosystems overperforming in different industries, using the <u>StartupBlink Pro</u>.

# **Edtech Rankings**



Industry Rank	City	Country	Rank Difference from Global	Total Score
1	San Francisco Bay	United States	_	94.47
2	Beijing	China	+4	55.08
3	Boston Area	United States	+2	30.62
4	Shanghai	China	+3	29.38
5	Bangalore	India	+3	26.41
6	Moscow	Russia	+23	24.18
7	New York	United States	-5	20.48
8	Mumbai	India	+9	18.09
9	Los Angeles Area	United States	-5	17.62
10	London	United Kingdom	-7	17.36
11	Paris	France	-1	14.68
12	Salt Lake City - Provo Area	United States	+19	14.23
13	Tel Aviv Area	Israel	-4	12.15
14	Berlin	Germany	-2	11.42
15	New Delhi	India	-2	11.21
16	Kitchener Waterloo	Canada	+75	10.45
17	Pittsburgh	United States	+41	10.14
18	Vienna	Austria	+53	9.06
19	Singapore City	Singapore	+3	8.61
20	Tokyo-Yokohama Area	Japan	-5	8.52
21	Jakarta	Indonesia	+11	8.18
22	Chicago	United States	-8	7.20
23	Kuala Lumpur	Malaysia	+65	7.02
24	Washington DC Area	United States	-5	6.83
25	Toronto	Canada	-1	6.76
26	Amsterdam	The Netherlands	+1	6.67
27	Portland	United States	+27	6.59
28	Austin	United States	-8	6.23
29	Helsinki	Finland	+19	6.04
30	Stockholm	Sweden	-7	6.00

### **Edtech Rankings**



San Francisco is the leading startup ecosystem for Edtech, almost doubling the total score of its closest contender, Beijing. However, the gaps in this industry are closing, as last year San Francisco's score was three times that of Beijing.

Boston, in 3rd place, has increased by 4 spots, while Moscow, which excels in Edtech, ranks 6th in this category, losing 2 positions from last year. Kitchener Waterloo and Kuala Lumpur managed to overperform their global positions by 75 and 65 places respectively. The top 10 has some Edtech underperformers, namely New York, Los Angeles, and London, not holding up to their global industry rankings in the top 5. Also, two Indian ecosystems, Bangalore and Mumbai, are ranked in the top 10 for this industry but are overperforming their overall position in the index.

There is notable volatility across cities in the Edtech industry this year. Vienna, Austria, has managed to gain 92 positions since last year, while Salt Lake City, Tel Aviv, and Helsinki all improved by more than 20.

# **Energy & Environment Rankings**



Industry Rank	City	Country	Rank Difference from Global	Total Score
1	San Francisco Bay	United States	_	35.32
2	Houston	United States	+47	20.04
3	Salt Lake City - Provo Area	United States	+28	11.29
4	Melbourne	Australia	+38	11.27
5	Berlin	Germany	+7	10.27
6	Vancouver	Canada	+34	10.23
7	Edinburgh	United Kingdom	+89	10.15
8	Washington DC Area	United States	+11	10.14
9	Stockholm	Sweden	+14	10.12
10	Tel Aviv Area	Israel	-1	9.52
11	Dublin	Ireland	+35	9.27
12	Albuquerque	United States	+125	9.10
13	New Delhi	India	_	8.66
14	London	United Kingdom	-11	7.69
15	Rome	Italy	+128	7.21
16	Barcelona	Spain	+21	7.02
17	New York	United States	-15	6.61
18	Los Angeles Area	United States	-14	6.59
19	Boston Area	United States	-14	6.47
20	Paris	France	-10	5.42
21	Toronto	Canada	+3	5.14
22	Denver	United States	+12	5.03
23	Seattle	United States	-12	4.93
24	Chicago	United States	-10	4.78
25	Tokyo-Yokohama Area	Japan	-10	4.67
26	San Diego	United States	-5	4.64
27	Calgary	Canada	+77	4.51
28	Amsterdam	The Netherlands	-1	4.49
29	Moscow	Russia	_	4.40
30	Austin	United States	-10	4.35

### **Energy & Environment Rankings**



13 out of 30 cities in the strategic Energy & Environment industry belong to the US, including the top three. Along with San Francisco, Houston excels in Energy & Environment Technology innovations, ranking 2nd globally and overperforming its global rank by 47 spots. Two additional jumps were made back-to-back by Salt Lake City and Melbourne, rising 54 and 29 places respectively to the 3rd and 4th place, while the previous holders of these spots - Stockholm and Los Angeles - have dropped to 9th and 18th. Even with this drop, Stockholm still overperforms its global ranking by 14 positions, while both Los Angeles and Boston are now underperforming by 14. New York is also underperforming compared to its overall ranking by 15 places.

Moscow has also experienced a significant drop of 22 positions, which now aligns with its overall rank of 29th.

Boston's place at 5th last year is now occupied by Berlin, replacing Stockholm as Europe's representative in the top 5. Here we also see positive performances of Albuquerque and Rome, surpassing their overall positions by more than 120 spots, which is amplified by the fact that this is Albuquerque's first year in our Energy & Environment rankings. Edinburgh is also new to the table and starting at 7th place, which is a considerable achievement.

Energy & Environment is the only industry where no single Chinese city is ranked in the top 30. Asia is represented in this industry by New Delhi (13th) and Tokyo-Yokohama (25th).

Another interesting observation is that the second most prominent country is Canada, with 3 cities in the top 30. Two of them, Vancouver and Calgary, have gained 9 and 15 positions respectively, furthering their overperformance to even more significant margins. Toronto, on the other hand, has dropped 8 positions, retaining a small advantage over its overall ranking. Generally, as the gaps between ranked ecosystems are relatively small, this industry is volatile, and the rankings could change significantly next year.

# **Fintech Rankings**



Industry Rank	City	Country	Rank Difference from Global	Total Score
1	San Francisco Bay	United States	_	133.75
2	London	United Kingdom	+1	76.07
3	New York	United States	-1	61.32
4	São Paulo	Brazil	+12	23.78
5	Tel Aviv Area	Israel	+4	21.91
6	Berlin	Germany	+6	19.48
7	Boston Area	United States	-2	18.64
8	Los Angeles Area	United States	-4	17.42
9	Hong Kong	China	+27	16.41
10	Singapore City	Singapore	+12	16.26
11	Sydney	Australia	+27	15.12
12	Amsterdam	The Netherlands	+15	14.62
13	New Delhi	India	-	14.54
14	Stockholm	Sweden	+9	14.49
15	Atlanta	United States	+13	14.02

### **Fintech Rankings**



Fintech has been a growing industry in recent years, and it's fascinating to see how some ecosystems are overperforming here when compared to their overall rankings. The COVID-19 pandemic has accelerated the growth of Fintech in many countries, with cashless payments becoming the norm and ecommerce, edtech, and food delivery companies experiencing a boom resulting in increased digital payments.

The <u>Global Fintech Index Rankings</u> were presented by our partner Findexable in 2020 and 2021. As the 2022 Global Fintech Index Rankings have not been published by Findexable at the time of this report, we provide an overview of the 2021 results here.

Leaders of the 2020 ranking, San Francisco, London, and New York have maintained their positions of 1st, 2nd, and 3rd rank respectively in 2021. Brazil's São Paulo has improved its ranking from 5th to 4th. Tel Aviv, which was not present in the Top 15 cities in 2020, has jumped into position 5, and Berlin is ranked 6th. São Paulo, Tel Aviv, and Berlin overperform in this industry compared to their overall rankings. Boston and Los Angeles take the 7th and 8th positions.

The gaps between every two cities in positions 1 through 4 are significant, suggesting that changes in the top three ranking cities are less likely to change within a single year. But gaps in scores between cities ranked 4th through 20th are much smaller, suggesting that shifts in rankings can be expected as certain ecosystems strengthen their Fintech focus faster than others.

London, the highest-ranked European city, has 4 times the score of Berlin, the highest-ranking EU city, suggesting that no EU city is in a position to threaten London's position as Europe's top post-Brexit Fintech hub. In Asia, Hong Kong is ranked 9th, Singapore 10th, Beijing 17th, and Tokyo 19th. The United States dominates the top 20 list with six cities featured: San Francisco, New York, Boston, Los Angeles, Atlanta, and San Diego. Four of these cities are in the global top 10. Amsterdam and Stockholm both entered the global top 20, ranking 12th and 14th respectively and emerging as Fintech hubs in the European Union. New Delhi at 13th unseated Bangalore as the leading city for Fintech in India, pushing the latter to the 20th position globally.

Major overperformers in Fintech are Hong Kong (9th) and Sydney (11th), both ranking substantially higher than their overall ranking.

# **Foodtech Rankings**



Industry Rank	City	Country	Rank Difference from Global	Total Score
1	San Francisco Bay	United States	_	38.92
2	New York	United States	-	34.22
3	Boston Area	United States	+2	23.15
4	Chicago	United States	+10	19.10
5	Shanghai	China	+2	19.04
6	London	United Kingdom	-3	18.52
7	Los Angeles Area	United States	-3	15.75
8	Raleigh Durham	United States	+33	12.53
9	Berlin	Germany	+3	12.29
10	Atlanta	United States	+18	11.69
11	Washington DC Area	United States	+8	11.26
12	Charlotte	United States	+61	9.94
13	New Delhi	India	_	9.80
14	Bangalore	India	-6	9.44
15	Barcelona	Spain	+22	9.39
16	Mumbai	India	+1	9.22
17	Dubai	United Arab Emirates	+44	8.09
18	Helsinki	Finland	+30	7.48
19	Santiago	Chile	+48	7.12
20	Paris	France	-10	6.29
21	Seoul	South Korea	+4	6.01
22	Chongqing	China	+159	5.78
23	Tokyo-Yokohama Area	Japan	-8	5.55
24	Lagos	Nigeria	+57	5.52
25	Austin	United States	-5	5.32
26	Seattle	United States	-15	5.22
27	San Diego	United States	-6	5.05
28	Boulder	United States	+27	4.98
29	Dallas-Fort Worth	United States	-3	4.96
30	Denver	United States	+4	4.90

### **Foodtech Rankings**



Last year, the Foodtech industry was the only one San Francisco didn't dominate. This year, San Fran swept them all. However, it's still the industry with the smallest gap between first and second place, so these results aren't set in stone. That said, the best four cities are located in the US, so on a country level, things are unchanged. It's also possible that after getting first-place San Francisco will continue extending the gap , as has happened with every other industry.

The top two cities have widened their lead in 2022. Last year, the gap between the 2nd and 3rd ranked cities was 35%. This year, the gap increased to 48%.

3rd place has been overtaken by Boston, 4th by Chicago (a noticeable increase in ranks by 6 positions), and 5th by Shanghai. These two last cities have gained their positions in the top 5 at the expense of London, which is now in 6th place, dropping three spots and underperforming by the same margin. Another city that suffered a drop out of the top 5, Berlin now places 9th. As such, Europe's share in the top 5 dropped from two cities in 2021 to no representation this year.

Besides the aforementioned cities, a few big winners this year are Raleigh Durham (US), which has gained 27 positions to rank 8th, and overperforms its overall ranking by an even bigger margin. Also, Charlotte, now ranked 12th, up 52 positions and overperforming its overall ranking by 61 spots.

Generally, this industry is dominated by the US. Half the rankings are occupied by US cities, along with 7 of the top 10. However, some significant achievements have been realized by cities outside the US, namely Dubai (UAE), Helsinki (Finland), Santiago (Chile), Seoul (South Korea), Chongqing (China), and Lagos (Nigeria). They all significantly improved their positions, and are also overperforming compared to global rank. Chongqing has managed to improve by more than 100 places, now almost 160 places ahead of its global ranking. And Lagos, the only newly ranked city in the top 30 at 24th, has seen significant overperformance compared to its global rank as well. This achievement deserves special recognition because Lagos is the only African city to be ranked in the global top 30 for any of the 11 industries. India has three cities in the top 30, the biggest number besides the US, and all of them have gained ranks this year. The notable underperformers in this industry are Seattle and Paris, both losing position and dropping under their overall rankings by more than 10 places.

# Hardware & IoT Rankings



Industry Rank	City	Country	Rank Difference from Global	Total Score
1	San Francisco Bay	United States	_	141.34
2	Beijing	China	+4	50.56
3	Shenzhen	China	+15	43.18
4	New York	United States	-2	39.44
5	Shanghai	China	+2	33.03
6	Boston Area	United States	-1	32.91
7	Taipei City	Taiwan	+40	32.54
8	Tokyo-Yokohama Area	Japan	+7	29.95
9	Los Angeles Area	United States	-5	29.66
10	Tel Aviv Area	Israel	-1	24.00
11	London	<b>United Kingdom</b>	-8	23.23
12	Seoul	South Korea	+13	23.03
13	Amsterdam	The Netherlands	+14	21.36
14	Dallas-Fort Worth	United States	+12	20.36
15	Berlin	Germany	-3	19.64
16	Austin	United States	+4	18.84
17	Paris	France	-7	14.37
18	Atlanta	United States	+10	13.40
19	Bangalore	India	-11	13.25
20	Miami Area	United States	+13	12.85
21	Toronto	Canada	+3	11.49
22	Vancouver	Canada	+18	10.54
23	Hsinchu	Taiwan	+173	10.43
24	Copenhagen	Denmark	+29	10.23
25	Houston	United States	+24	9.81
26	Helsinki	Finland	+22	9.79
27	Melbourne	Australia	+15	9.67
28	Burlington	United States	+59	9.60
29	San Diego	United States	-8	9.52
30	Stockholm	Sweden	-7	9.25

### **Hardware & IoT Rankings**



San Francisco is again the global leader in this industry, almost tripling the 2nd place's score, similarly to last year. The top 6 cities are equally distributed between US and China, and these top 6 are relatively stable, but the three cities here are the only ones China has in this top 30, while the US once again retains leadership with 11 cities on the list.

Taipei, at 7th, overperforms its global rank by 40 positions; it's worth mentioning that Taiwan has two cities in the top 30, a great achievement for the island nation, and both of them perform very well relative to their global score, especially Hsinchu at 23rd, surpassing its global rank by 173.

Another good overperformer is newly ranked Burlington at 28th, 59 places higher than its global score. There have been other noticeable increases, like Atlanta which is up 32 places, but overall this is a stable industry with mostly small changes. The biggest underperformers are Bangalore (India), falling behind its global ranking by 11 places, and London, which holds 11th place and is not keeping up with its 3rd position overall.

# **Healthtech Rankings**



Industry Rank	City	Country	Rank Difference from Global	Total Score
1	San Francisco Bay	United States	_	197.99
2	Boston Area	United States	+3	145.78
3	New York	United States	-1	125.12
4	San Diego	United States	+17	44.49
5	Los Angeles Area	United States	-1	35.01
6	Denver	United States	+28	32.40
7	Seattle	United States	+4	31.69
8	London	United Kingdom	-5	27.01
9	Dallas-Fort Worth	United States	+17	25.42
10	Miami Area	United States	+23	22.78
11	Washington DC Area	United States	+8	22.41
12	Shanghai	China	-5	22.16
13	Raleigh Durham	United States	+28	21.82
14	Beijing	China	-8	20.97
15	Lexington	United States	+90	19.00
16	Austin	United States	+4	18.86
17	Nashville	United States	+57	18.06
18	Minneapolis	United States	+25	17.48
19	Hangzhou	China	+11	16.80
20	Dublin	Ireland	+26	16.21
21	Stockholm	Sweden	+2	15.91
22	Chicago	United States	-8	15.63
23	Toronto	Canada	+1	15.17
24	Louisville	United States	+74	14.92
25	Paris	France	-15	14.72
26	Cambridge	United Kingdom	+37	14.58
27	Munich	Germany	+12	14.34
28	Oxford	United Kingdom	+67	13.95
29	Basel	Switzerland	+78	13.78
30	Oulu	Finland	+165	13.59

### **Healthtech Rankings**



Healthtech is probably the most US-dominated industry. Out of the top 30 cities, 17 are from the US, and 10 of the top 11 places are occupied by the US. No surprise, San Francisco is first, but this year is characterized by other cities rapidly closing the gap. Last year, San Francisco's score was 136% and 189% better than the 2nd and 3rd ranked cities, this year the gap shrunk to only 36% and 58%. Boston not only overtook New York at 2nd but also managed to significantly close the gap with San Francisco.

A major US-based achievement was realized by Lexington, up more than 100 positions this year and overperforming its global rank by 90 places. Even that can't compare with Oulu, Finland, which managed to climb 211 positions in one year and steal last place on the top 30, outshining its global performance by 165 places. Other significant overperformers are Denver, Raleigh Durham, Nashville, and Louisville from the US, and Cambridge and Oxford from the UK.

Even if we don't consider the US, Healthtech is a bit more concentrated than other industries, with three cities from the UK and three more from China, for only 10 unique countries in the top 30.

In the top 10 the main underperformer in London, which once again can't match its 3rd position overall, even though it slightly increased over last year. The biggest underperformer is Paris, falling behind by 15 places; also like London, its position has increased slightly this year. Another notable change is Beijing, which dropped 8 places, falling out of the top 10 and underperforming by the exact number dropped. And we also have Chicago, which dropped 10 positions and now underperforms by 8.

# **Marketing & Sales Technology Rankings**



Industry Rank	City	Country	Rank Difference from Global	Total Score
1	San Francisco Bay	United States	_	121.00
2	New York	United States	-	86.47
3	Los Angeles Area	United States	+1	55.00
4	London	United Kingdom	-1	45.88
5	Boston Area	United States	_	25.37
6	Tel Aviv Area	Israel	+3	24.96
7	Berlin	Germany	+5	21.95
8	Seattle	United States	+3	17.91
9	Chicago	United States	+5	16.54
10	San Diego	United States	+11	15.79
11	Dallas-Fort Worth	United States	+15	15.35
12	Paris	France	-2	14.46
13	Toronto	Canada	+11	13.41
14	Atlanta	United States	+14	12.67
15	Shenzhen	China	+3	12.63
16	Austin	United States	+4	12.10
17	Moscow	Russia	+12	11.93
18	Tokyo-Yokohama Area	Japan	-3	11.81
19	Tallinn	Estonia	+43	10.60
20	Bangalore	India	-12	10.51
21	Helsinki	Finland	+27	9.83
22	Santiago	Chile	+45	9.58
23	Kyiv	Ukraine	+70	9.23
24	Vancouver	Canada	+16	9.04
25	Las Vegas	United States	+52	8.62
26	Barcelona	Spain	+11	8.60
27	Salt Lake City - Provo Area	United States	+4	8.56
27	Singapore City	Singapore	-6	7.76
29	Amsterdam	The Netherlands	-2	7.75
30	Washington DC Area	United States	-11	7.12

### Marketing & Sales Technology Rankings



The top 4 in this industry haven't changed since last year, with San Francisco dominating the leaderboard followed by New York, Los Angeles, and London. But the gaps between these cities decreased, showing growing levels of activity in cities other than San Francisco.

Boston has risen by 5 positions to 5th, Berlin gained 14 places, Seattle 7, and San Diego 20, all of which resulted in top 10 positions. Other big jumps in positions include Shenzhen and Salt Lake City, and both these cities have equalized their Marketing & Sales rankings with their global scores. This is another US-heavy industry, with 13 cities out of 30, but we also see some unusual countries. Kyiv (Ukraine) is present in just two industry rankings, and this is one of them, overperforming by 70 places compared to its overall ranking.

Tallinn (Estonia) dropped by 8 positions this year but still overperformed by 43. Las Vegas overperformed by 52 places and climbed to 25th. Santiago has lost 10 positions but still retains a considerable advantage over its global rank, and is the only Latin American country in this industry ranking. The biggest underperformers are Bangalore (India), dropping 11 places and underperforming by 12, and Washington DC, dropping by 3 places and underperforming by 11.

# Social & Leisure Technology Rankings



Industry Rank	City	Country	Rank Difference from Global	Total Score
1	San Francisco Bay	United States	_	256.60
2	New York	United States	_	133.78
3	London	United Kingdom	_	93.77
4	Los Angeles Area	United States	-	75.41
5	Beijing	China	+1	72.05
6	Stockholm	Sweden	+17	42.07
7	Tel Aviv Area	Israel	+2	40.58
8	Boston Area	United States	-3	39.26
9	Portland	United States	+45	35.73
10	Moscow	Russia	+19	31.78
11	New Delhi	India	+2	30.03
12	Berlin	Germany	-	27.70
13	Seoul	South Korea	+12	26.68
14	Paris	France	-4	23.63
15	Amsterdam	The Netherlands	+12	22.49
16	Dallas-Fort Worth	United States	+10	21.35
17	Chicago	United States	-3	20.92
18	Bangalore	India	-10	19.98
19	Raleigh Durham	United States	+22	19.79
20	Tokyo-Yokohama Area	Japan	-5	18.74
21	Toronto	Canada	+3	16.51
22	Austin	United States	-2	16.36
23	Barcelona	Spain	+14	15.68
24	Washington DC Area	United States	-5	15.34
25	Seattle	United States	-14	14.90
26	Istanbul	Turkey	+40	14.14
27	São Paulo	Brazil	-11	13.87
27	Shenzhen	China	-9	13.87
29	Boulder	United States	+26	13.19
30	Taipei City	Taiwan	+17	13.16

### Social & Leisure Technology Rankings



San Francisco and New York reclaim 1st and 2nd in Social & Leisure rankings, with London coming in 3rd, Los Angeles 4th, and Beijing 5th. The main change in the top 5 since last year is London rising from 5th place to 3rd and Los Angeles and Beijing each losing one place as a consequence. Climbing two positions into the top 5 is by itself a unique achievement; London's rise is even more impressive when realizing that the gap between the scores of San Francisco and London decreased from 574% in 2021 to 174% this year. Similarly, in spite of their decline by one spot, Los Angeles and Beijing both had a good year, shrinking their gap with San Francisco. Los Angeles reduced the gap from 379% to 240%, and Beijing from 383% to 256%.

In this industry, there are several well-performing cities: Stockholm at 6th place overperforms by 17, Portland at 9th overperforms by 45, Moscow at 10th overperforms by 19, Raleigh Durham at 19th overperforms by 22 and, Istanbul at 26th overperforms by 40, a city present exclusively in this industry's rankings.

The highest position changes belong to Shenzhen, Istanbul, and Dallas, all jumping by more than 30 places. The disappointing side of the leaderboard includes Seattle, dropping 8 places and underperforming by 14, and São Paulo, dropping 7 places and underperforming by 11.

# **Software & Data Rankings**



Industry Rank	City	Country	Rank Difference from Global	Total Score
1	San Francisco Bay	United States	-	795.70
2	New York	United States	_	253.05
3	Boston Area	United States	+2	161.39
4	Los Angeles Area	United States	-	159.74
5	Beijing	China	+1	155.14
6	Tel Aviv Area	Israel	+3	147.99
7	London	United Kingdom	-4	133.12
8	Seattle	United States	+3	117.01
9	Paris	France	+1	108.77
10	Shanghai	China	-3	84.42
11	Berlin	Germany	+1	83.21
12	Bangalore	India	-4	83.05
13	Chicago	United States	+1	80.72
14	Toronto	Canada	+10	69.38
15	Washington DC Area	United States	+4	68.12
16	Tokyo-Yokohama Area	Japan	-1	64.71
17	Austin	United States	+3	60.80
18	San Diego	United States	+3	58.67
19	Salt Lake City - Provo Area	United States	+12	57.87
20	Denver	United States	+14	55.33
21	Atlanta	United States	+7	49.27
22	Munich	Germany	+17	47.53
23	Sydney	Australia	+15	46.42
24	Dallas-Fort Worth	United States	+2	43.45
25	Kyiv	Ukraine	+68	43.04
26	Singapore City	Singapore	-4	41.11
27	Moscow	Russia	+2	40.49
28	Philadelphia	United States	+7	40.17
29	Vancouver	Canada	+11	39.53
30	Madrid	Spain	+20	37.86

### **Software & Data Rankings**



Software & Data has the highest scores out of all the industries, as it is the industry with the most startup activity. The top 7 cities in rank order are San Francisco, New York, Boston, Los Angeles, Beijing, Tel Aviv, and London. The only ranking change in the top 7 this year in Los Angeles and Beijing switching places. Like other industries, San Francisco's contenders are closing the gap. New York (ranked 2nd), Los Angeles (4th), Tel Aviv (6th), and London (7th) decreased their gap with San Francisco from 400%, 680%, 859%, and a staggering 1030% respectively in 2021 to 214%, 398%, 438%, and 498% this year. With some exceptions, gaps in scores between cities are material, hence the relative stability in this industry ranking. Exceptions include Bangalore and Toronto, gaining 5 and 7 places respectively.

The two biggest overperformers here are Kyiv, Ukraine, which ranks 68 places higher than its global rank despite dropping by 6 positions, and Madrid, Spain, gaining 14 places and now overperforming by 20 spots. Moscow has dropped significantly, aligning with the drop in its overall ranking.

# **Transportation Rankings**



Industry Rank	City	Country	Rank Difference from Global	Total Score
1	San Francisco Bay	United States	_	95.80
2	Shanghai	China	+5	62.23
3	Beijing	China	+3	34.25
4	Los Angeles Area	United States	-	32.49
5	Bangalore	India	+3	28.94
6	New York	United States	-4	27.40
7	Dallas-Fort Worth	United States	+19	17.05
8	New Delhi	India	+5	16.61
9	Tel Aviv Area	Israel	_	16.56
10	Minneapolis	United States	+33	15.19
11	Berlin	Germany	+1	15.06
12	Seattle	United States	-1	14.82
13	Jakarta	Indonesia	+19	14.59
14	Guangzhou	China	+37	13.81
15	São Paulo	Brazil	+1	13.64
16	Hangzhou	China	+14	13.34
17	London	United Kingdom	-14	13.30
18	Munich	Germany	+21	13.23
19	Shenzhen	China	-1	12.97
20	Changzhou	China	+383	12.07
21	Dubai	United Arab Emirates	+40	11.08
22	Chicago	United States	-8	10.87
23	Hong Kong	China	+13	10.46
24	Tallinn	Estonia	+38	10.20
25	Helsinki	Finland	+23	10.03
26	Stockholm	Sweden	-3	9.96
27	Miami Area	United States	+6	9.92
28	Auckland	New Zealand	+84	9.76
29	Taipei City	Taiwan	+18	9.74
30	Atlanta	United States	-2	9.67

### **Transportation Rankings**



San Francisco ranks 1st in Transportation, and the 2nd and 3rd places are both occupied by Chinese cities, Shanghai and Beijing respectively, as was the case last year. In fact, this is the industry with the biggest Chinese representation: 7 cities out of 30 are Chinese, just two cities behind the traditional leader, the US. The Chinese success can be explained by a relatively large number of Chinese special entities - notably unicorns - in this industry.

China is also responsible for the biggest overperformance across industries this year - newly ranked Changzhou at 20th place overperforms its global rank by 383 positions in Transportation - no one else even comes close.

Other notable cities in transportation include Minneapolis, Guangzhou, Dubai, Tallinn, and Auckland, going as far as overperforming by 84 places (this is the only industry where Auckland is ranked in the top 30).

There has also been a considerable jump by Helsinki (ranked 25th, up 54 positions), which achieved great things in other industries this year as well, and by Dubai at 20th, up 30 positions. As for the less positive side, London underperforms by 14 places, occupying the 17th position, and New York underperforms by 4 positions. These cities occupy the 3rd and 2nd places respectively in the overall Index, but they remained outside the top 5 in this industry.

# **Ecosystem Ranking by**Number of Special Entities

In the methodology chapter we described the definitions and roles of special startup entities: unicorns, exits above US\$ 1 billion, pantheons, and global startup influencers. These special entities often have massive economic effects on cities in the form of job creation and tax revenues.

They also play a substantial role in shaping the ecosystem's narrative and attraction power. In this alternative index, we present the rankings of countries and cities by the number of special entities these ecosystems have produced.



#### **Top Countries by Number of Special Entities**

Country	Number of Unicorns	Number of Exits	Number of Pantheons	Number of Influencers	Total	Year
United States	556	133	294	120	1103	2022
	332	150	102	106	690	2021
China	177	15	48	4	244	2022
	139	43	21	6	209	2021
United Kingdom	41	13	22	4	80	2022
	28	2	8	2	40	2021
India	67	4	8	0	79	2022
	27	2	5	0	34	2021
Germany	30	9	14	0	53	2022
	17	5	9	0	31	2021
Israel	23	6	8	3	40	2022
	14	1	5	2	22	2021
Canada	19	2	12	2	35	2022
	6	3	1	2	12	2021
France	26	3	0	1	30	2022
	12	0	4	0	16	2021
Brazil	16	1	5	2	24	2022
	11	1	1	1	14	2021
Sweden	5	5	9	1	20	2022
	4	3	5	2	14	2021

With a substantial increase in its number of unicorns (556) in 2022, the United States is the only country with a total special entities count of more than a thousand. China, ranked 2nd with 244 special entities, is the only other country to have more than 100 of these in the rankings. Among top-ranked countries, Canada and India have seen the highest increase in the number of unicorns, by 216% and 148% respectively, since last year. Consequently, Canada made a significant jump in this ranking from 14th in 2021 to 7th in 2022; and India strongly overperforms by ranking 4th for special entities, compared to 20th in overall ranking. Similarly, Brazil also performs well in producing special entities: it is ranked 9th in special entities and 26th overall. These overperforming countries have a population larger than 100 million people, giving them a unique advantage in producing special entities that in some cases cater only to their vast local market. Israel's strong achievement is also worth noticing. In spite of its small population, Israel has produced many more special entities than much larger countries. In fact, when considering population size, Israel has produced more special entities per capita than even the US.

### **Top Cities by Number of Special Entities**

<u>-</u>							
City	Country	Number of Unicorns	Number of Exits	Number of Pantheons	Number of Influencers	Total	Year
San Francisco	United States	246	113	74	63	496	2022
Bay		156	71	57	55	339	2021
New York	United States	107	29	17	17	170	2022
		50	15	12	15	92	2021
Beijing	China	67	19	10	3	99	2022
		57	19	13	3	92	2021
Los Angeles	United States	35	14	7	8	64	2022
Area		21	13	5	6	45	2021
Shanghai	China	45	17	1	0	63	2022
		33	14	1	0	48	2021
Boston Area	United States	29	27	5	1	62	2022
		18	10	3	1	32	2021
London	United Kingdom	34	13	10	4	61	2022
		20	0	6	2	28	2021
Bangalore	India	30	3	3	0	36	2022
		12	2	3	0	17	2021
Tel Aviv Area	Israel	20	8	5	2	35	2022
		11	1	4	2	18	2021
Seattle	United States	12	10	8	5	35	2022
		9	3	5	5	22	2021
Paris	France	26	0	2	1	29	2022
		12	0	3	0	15	2021
Berlin	Germany	21	4	4	0	29	2022
		8	2	4	0	14	2021
Chicago	United States	15	8	1	0	24	2022
		11	1	1	0	13	2021
Shenzhen	China	19	1	2	0	22	2022
		14	1	3	2	20	2021
São Paulo	Brazil	13	5	1	2	21	2022
		9	1	1	1	12	2021
New Delhi	India	17	3	0	0	20	2022
		11	0	1	0	12	2021
Hangzhou	China	14	3	2	1	20	2022
		15	1	2	1	19	2021
Austin	United States	9	1	3	6	19	2022
		4	1	1	7	13	2021
Singapore City	Singapore	13	2	2	2	19	2022
		4	2	2	0	8	2021
Washington DC	United States	10	5	1	2	18	2022
Area		4	4	1	0	9	2021

At the city level, it's unsurprising to see San Francisco as the undisputed leader, with 496 special entities. New York has overtaken Beijing to become the city with the 2nd highest number of special entities, and the only other city to cross the 100 special entities threshold with 170. Yet the real story behind these numbers is revealed when you compare the number of special entities in each city in 2022 versus 2021. While Beijing increased the number of its special entities by a modest percentage of 11%, San Francisco Bay and New York saw explosive growth: San Francisco Bay increased its special entity count by 75% and New York by 121% in a single year. Clearly, the pace of producing unicorns and exits in the US has been significantly more disruptive than in China this year. The Chinese cities of Shenzhen and Hangzhou, which were in the top 10 last year, have been pushed to 14th and 16th respectively. Although Shenzhen and Hangzhou now have more special entities than last year, other ecosystems have simply grown their special entity count faster.

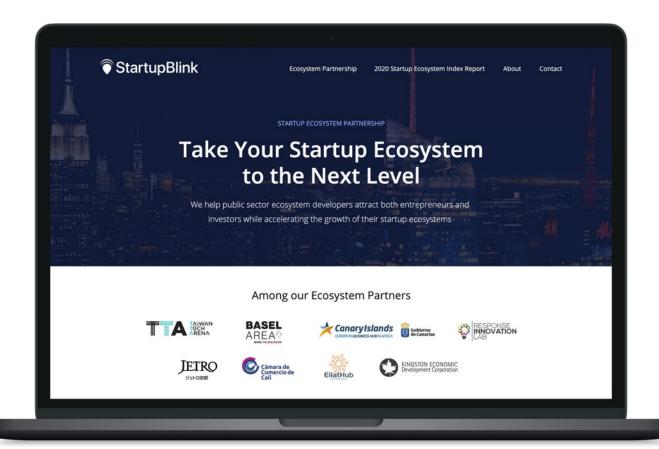
Europe's leading ecosystems also produce special entities at the same explosive pace as their US peers. London, Paris, and Berlin grew the number of their special entities by 135%, 93%, and 107% respectively in the last year. If the pace of growth among European and US ecosystems continues to be this much faster than growth among Chinese ecosystems, Beijing and Shanghai may give more ground over the next few years.

Tel Aviv is a new entrant in the top 10 this year, ranking 9th in 2022 versus 12th in 2021. A closer observation of Tel-Aviv's progress shows the true competitive nature of the global startup scene. Last year, Tel-Aviv had 16 special entities. This year, it has 35. A city with 35 special entities would have ranked 6th worldwide in 2021, but in 2022 this number puts Tel Aviv in the 9th position. In other words, many other strong ecosystems have also progressed significantly in 2022. For example, Bangalore and São Paulo rank 8th and 15th in their special entity count in 2022, both realizing impressive growth in special entities since 2021 when they ranked 10th and 20th respectively. Bangalore saw its count grow by 112% and São Paulo by 91%. A few years ago, producing one or a few special entities per year was enough to put an ecosystem in the global spotlight. This is no longer the case. Competition is fierce, and many ecosystems are now producing special entities in large numbers.

# Ecosystem Case Studies ••••••

The bulk of the StartupBlink Rankings Report is structured by presenting the ecosystems of each ranked country. In this chapter, we present case studies focusing on specific cities.

This portion of the Report was written in collaboration with public sector <u>ecosystem</u> <u>partners</u>.



# Singapore

AN INITIATIVE OF









Cost of Living: 13% cheaper than London



**Internet Speed 192.17** Mbps

"With a globally connected and conducive ecosystem that facilitates R&D and innovation, Singapore is well poised as a springboard for startups to scale in Southeast Asia and beyond. Singapore welcomes global players to join our startup ecosystem and seize investment and innovation opportunities for growth in the region through Singapore." - Edwin Chow, Assistant Chief Executive Officer, Innovation & Enterprise, Enterprise Singapore

#### **Ranking Trend**

Singapore City ranks 22nd globally, up by 3 spots, and 8th in Asia Pacific Region in the 2022 Global Startup Ecosystem Index.

#### **Promising Industries**

Singapore City overperforms in Fintech, where it ranks 10th in the world. Singapore City also ranks in the top 30 in Ecommerce and Retail (14th), Edtech (19th), Software and Data (26th), and Marketing and Sales (28th).

#### **Reasons to Relocate**

- ⇒ Asia's most competitive economy Institute for Management Development (IMD) World Competitiveness Ranking 2021. In 2021, 52% of equity funding generated in Southeast Asia was from Singapore. Singapore remains a key market for startups to scale regionally.
- Rule of Law and Pro-business environment Ranked 2nd in the World Bank Ease of Doing Business Report (2020). Further, Singapore's strong IP protection has been listed top five in the world by the World Economic Forum's Global Competitiveness Index since 2014. The businessfriendly policies and regulations here have also allowed Singapore to become the 2nd easiest location in the world to do business.
- ⇒ Large MNCs including Dyson and BioNTech have set up their headquarters in SG to tap on the engineering and science talent. Semiconductor manufacturing giant GlobalFoundries is also building a plant in Singapore2.
- High connectivity to fast-growing markets in Asia - Resilient and growing investment landscape in Singapore, with a strong presence of notable global Venture Capitalists and Family Offices including Sequoia Capital, B Capital, and Lightspeed Venture Partners

#### **Public Sector Incentives**

- Startup Visas like Entrepass allows foreign entrepreneurs to start and operate an innovative technological business in Singapore and Tech@SG allows fast-growing companies to access critical talent by providing a company-level endorsement for employment passes.
- Venture Capital Fund Incentive (VCFI)/ Fund Management Incentive (FMI) provides tax exemption for income for Funds that invest in Singapore-based businesses and startups and offers fund management companies a concessionary tax rate on income derived from funds.
- Startup SG Tech fast-tracks the commercialization of proprietary technology developed by startups to catalyze business growth.
- Startup SG Founder provides first-time entrepreneurs with mentorship support and startup capital grant through Accredited Mentor Partners (AMPs).
- Startup SG Equity is a scheme that comprises a co-investment approach and a fund-of-funds approach. Under the co-investment approach, Enterprise Singapore's investment arm, SEEDS Capital, alongside SGInnovate, taps on private sector investors' expertise to assess and coinvest in eligible startups.
- ⇒ The Global Innovation Alliance (GIA) partners with in-market players to run inbound and outbound GIA Acceleration Programmes, supporting Singapore startups and SMEs in venturing abroad, and international startups in scaling up in Asia through Singapore as a springboard.

⇒ Singapore's government works closely with private sector ecosystem partners to support growth in Deep Tech sectors. Global support organizations and investors including 500 Startups, Plug and Play, and Sequoia have a presence in Singapore, connecting the ecosystem to the global community.

#### **Notable Unicorns and Startups**

- MirXes: Biotech firm that specializes in the development of RNA-focused research applications and diagnostic tests, including cancer and COVID-19 diagnostics
- PatSnap: Provides an intellectual property platform with AI and big data technologies, that provides and analyses data on intellectual property for its customers
- Carousell: An online marketplace for buying and selling new and pre-loved items, that targets the C2C and B2C market

# Co-working spaces and Venture Builders

- ⇒ JTC Launchpad @ one-north is a 6.5-hectare site that offers a workspace for 800 startups and 50 ecosystem players including incubators with startup developmental programs.
- Entrepreneur First provides incubator and accelerator programs for like-minded people who wants to co-found a startup and support them with a global network of founders, advisors, and investors
- → Antler invests in promising entrepreneurs and startups by providing a platform to connect with other co-founders and mentors while providing selected founders with knowledge in product management, legal matters, and customer validation.



### **Barcelona**





Catalonia o Trade & Investment





**Cost of Living:** 47% cheaper than London



**Internet Speed 93.71** Mbps

"Catalonia is the perfect mix between industry, innovation, and talent. Talent and business in Catalonia are driven by a powerful network of technology centers, prestigious universities and MBA programs, and an open business mindset. Catalan entrepreneurial and innovative spirit transforms talent into the business, ranks Barcelona among the top cities in the world to work in, and makes the city one of the best and fastest-growing startup hubs in Europe." Lluís Juncà i Pujol, CEO of Catalonia Trade & Investment.

#### **Ranking Trend**

Barcelona now ranks 37th globally and 7th in Europe on the 2022 Global Startup Ecosystem Index.

#### **Promising Industries**

Barcelona shows the strongest overperformance in Foodtech, where it ranks 15th globally, followed by Ecommerce & Retail (21st globally). Other strong verticals also include Social & Leisure and Marketing & Sales where Barcelona ranks 23rd, and 26th respectively.

#### **Reasons to Relocate**

- Availability of skilled talent for digital industries, good quality of life attracts talented professionals.
- Catalonia-based startups raised €1,479 million in 2021. This is 246% more than the investment volume attracted in 2020 and is the highest figure on record.
- ⇒ In 2021, a total of 207 rounds of investment were closed by Catalan startups. Barcelona ranks 4th in the EU for most rounds of funding closed.
- The health, business services, ICT, and mobile and leisure sectors account for 42% of startups.
- Startups mainly use technologies such as Big Data & AI, cloud computing, cutomation, or IoT & sensors.

#### **Public Sector Incentives**

- Catalonia offers a low corporate tax rate. It also has efficient tax deduction schedules for R&D activities, a competitive and skilled workforce environment, and diverse Government-led initiatives helping startups to succeed.
- Corporate benefits under the Spanish tax system include benefits of between 25% and 42% for **R&D** activities

- Optimal location for international holding companies (ETFs), thanks to its attractive Holding Tax Regime and the large Tax Treaty network available, both with the EU and Latam.
- Catalonia Trade and Investment connects global startups with the Barcelona and Catalonia business ecosystem, helps in validating market and business models, and advises in fundraising for early-stage companies.

#### Notable Startups

- Glovo, founded in 2015, is a courier service that purchases, picks up, and delivers products ordered through its mobile app.
- ⇒ <u>LetGo</u>, founded in 2015, provides a website and app that allows users to buy from, sell to, and chat with others locally.
- TravelPerk was founded in 2015. A travel management company that provides business travel and expense management services by automating spending limits and travel policies.

- SeedRocket is the leading accelerator in Spain which provides access to mentors, investors, and business angels with a strong focus on technology-based startups at a seed stage.
- **○** Gamebon is the video game incubator in Barcelona that was created to help develop teams that have mainly come from universities.
- Magis Teams provides a personalized incubation process to projects in very early stages, adapted to the needs of each entrepreneur.

# Taipei









Over the past couple of years, Taiwan has attracted the attention of the whole world with its commendable approach in handling the pandemic. Going forward, Taiwan aims to capitalize on opportunities created by the restructuring of the global supply chain accelerated by the pandemic and become a critical force in the future global economy.

#### **Ranking Trend**

Taipei City now ranks 46th in the 2022 Global Startup Ecosystem Index. Regionally, Taiwan continues to be one of the leading ecosystems, ranking 13th in Asia.

#### **Promising Industries**

Taipei City overperforms primarily in Hardware & IoT, where it is ranked 7th globally. Social & Leisure is another strong industry, where Taipei City ranks 30th globally.

#### Reasons to Relocate

- Hardware powerhouse
- Close links to Silicon Valley and other first-class ecosystems
- World Leader in health and successful COVID response
- Support for R&D through public expenditure
- Robust external financial position: Taiwan is the fifth largest creditor economy
- Foreign-friendly environment
- Technical capabilities: Taiwan is home to some of the highest-ranked technical and general universities in Asia
- Strong government support for startups

#### **Public Sector Incentives**

- ➡ Taiwan Employment Gold Card Makes it easier for foreign nationals to work in Taiwan without depending on their employer for a permit.
- Taiwan Tech Arena (TTA) A flagship startup program launched by the Ministry of Science and Technology in June 2018. Now with locations in Taipei and Tainan, TTA aims to further strengthen the overall development of Taiwan's startup ecosystem by bridging resources between northern and southern Taiwan and the world. To date, TTA has supported over 750 startups both locally and internationally and helped raise over US\$ 380 million in funding.
- TTA Black Card Program In 2020, TTA launched its Black Card Program to attract international serial entrepreneurs and investors to become part of the Taiwan startup ecosystem. To date, the TTA Black Card community has 35 members, including Steve Chen, Kevin Lin, Patrick Lee, Phil Chen, and Jameson Hsu to name a few. On top of access to TTA facilities and resources, members can apply for dedicated desks at TTA and are eligible to be referred to professional consulting services about doing business in Taiwan.

#### **Notable Startups**

- → Appier is a software-as-a-service (SaaS) company that uses artificial intelligence (AI) to power business decision-making. Founded in 2012, and now with 17 offices around the globe, the company raised \$271 million in its initial public offering on the Tokyo Stock Exchange in March 2021.
- ➡ Gogoro is a global technology leader in battery swapping ecosystems that enable sustainable mobility solutions for cities. Gogoro in April 2022 became a publicly listed company trading on the Nasdaq Global Select Market after a successful merger with Poema Global. The combined company now operates as Gogoro Inc.
- ➡ Perfect is a Taipeii-headquartered leading AI and AR beauty and fashion tech solution provider. The company announced its plan to launch a listing on the U.S. market in the third quarter of 2022 via a US\$ 1.02 billion merger deal with Provident Acquisition Corp in March.

- → AppWorks Accelerator, started in 2010 by founders for founders, AppWorks is a turbo engine built for seed-stage startups with a network of 435 startups and 1,402 founders. It is one of the largest of its kind in Greater Southeast Asia.
- ➡ Foodland Ventures is the VC & accelerator investing in disruptive technology and pushing the food industry forward. With operations in Asia and North America, Foodland Ventures leverages its partnership with leading F&B brands, industry partners, mentors, and investors, helping startups fundraise effectively while growing their businesses.
- IAPS is tech-oriented and the first university-affiliated startup accelerator founded in 2013. To date, IAPS has worked with 750+ startups and lab techs. It also works closely with Hsinchu Science Park and multiple Asian partners to build a global ecosystem connecting corporations, startups, and investors.



## Yokohama





Total Population: 3,773,000



Cost of Living: 40% cheaper than London



Internet Speed 44 Mbps

"Yokohama is a hub of highly advanced technologies in Japan, and many global companies are choosing to locate their HQ and R&D centers in Yokohama. Sustainability-oriented startup support and open innovation are at the center of our efforts." - Takeharu Yamanaka, Mayor of Yokohama

#### **Ranking Trend**

The Tokyo-Yokohama Area, a cluster that includes both Yokohama and Tokyo, ranks 15th globally and 2nd in East Asia in the 2022 Global Startup Ecosystem Index.

#### **Promising Industries**

■ Tokyo-Yokohama overperforms in a number of industries, starting with Hardware & IoT where they rank 8th, and followed by Software & Data at 16th. Other strong industries are Marketing & Sales, Edtech, and Energy & Environment where they rank 18th, 20th, and 25th respectively.

#### **Reasons to Relocate**

- One of the most international cities in Japan, enjoying the presence of global companies and startups
- There are 157 academic and R&D institutions in Yokohama preparing students for the workforce, a number second only to Tokyo
- Office rent in Yokohama is around 40% cheaper than in Tokyo
- Convenient location near major economic hubs in Japan and international airports
- ⇒ Yokohama is the fourth-best city in all of Asia in terms of quality of living, according to <u>Mercer</u>.

#### **Public Sector Incentives**

- The City of Yokohama offers tax incentives and subsidies for business locations: up to a 500 million JPY (3.85 million USD\*) tax incentive to rent space for a major HQ or R&D base, up to a 5 billion JPY (38.46 million USD\*) subsidy for office purchase/construction, and up to a 2.5 million JPY (19,200 USD\*) subsidy for specific industries.
  - \*Based on an exchange rate of 130 yen = 1 USD
- ➤ For foreign-affiliated companies moving to Yokohama, the City of Yokohama provides <u>support related</u> to establishing new businesses in the city, such as corporate registration, searching for an office, securing personnel, subsidies for office rent, and more, all through cooperation with the Japan External Trade Organization (JETRO)
- ⇒ The City of Yokohama operates a Startup Growth Support Center "YOXO BOX" where a series of acceleration programs and pitch events are held. For international entrepreneurs, YOXO BOX runs the Yokohama Startup VISA program which can help you acquire a year-long "Specially Designated Activities" visa.
- The Yokohama Future Organization, composed of startups, global companies, and universities, is a public-private-academia consortium of innovation that works to solve local issues by identifying promising ideas and technologies.

#### **Notable Startups**

- ⇒ 3DOM is developing elemental battery technologies for greater sustainability and efficiency related to the next generation of transportation infrastructure.
- J-Pharma is working to help treat incurable diseases, such as advanced cancer patients who were unable to benefit from standard chemotherapy.
- CoreTissue BioEngineering is developing artificial ligament for knee anterior cruciate ligament reconstruction.

- ➡ G Innovation Hub Yokohama: Directly connected to Yokohama Kannai Station, a shared office and coworking space that aims to bring innovation to business.
- WeWork Ocean Gate Minatomirai: Co-working space by global co-working space provider WeWork in Minatomirai in central Yokohama.
- CROSSBIE JAPAN: The Japanese branch of CROSSBIE, a Berlin based organization with a focus on bringing Japan and the global startup ecosystem together.



### **Sunshine Coast**









#### **Ranking Trend**

 Sunshine Coast ranks 243rd globally, increasing 6 spots, and 6th in Australia in the 2022 Global Startup Ecosystem Index.

#### **Promising Industries**

Sunshine Coast overperforms in the Energy & Environment and the Foodtech industries, where it ranks 56th and 57th respectively.

#### **Reasons to Relocate**

- Maroochydore city center has been designed for the 21st Century, breaking new ground with its extensive use of technology.
- Knowledge industries and professional services - substantial investment in co-working centers, maker spaces, and business accelerators to drive the growth of new businesses.
- Sunshine Coast International Broadband Network: The region has the fastest telecommunications connection to Asia from Australia's east coast and the second fastest to the United States.
- Compared to other Australian cities, housing is affordable on the Sunshine Coast. The availability of good quality housing and lower interest rates make it an excellent real estate investment choice.

#### **Public Sector Incentives**

- Sunshine Coast Council provides a range of specialist services to support local, national, and international business and to encourage new investment across the region.
- Incentives and assistance available to eligible applicants, enables projects to start sooner and helps offset various expansion, establishment, or relocation costs.

Startup Precinct - offers modern coworking facilities and a dedicated space for entrepreneurs.

#### **Notable Unicorns and Startups**

- Grease Boss developed a suite of tools that digitally transform the task of greasing Industrial equipment.
- Raidar Targetry provides a unique live-fire training experience through the use of moving and static targets.
- ⇒ Youi is one of the most successful startups headquartered on the Sunshine Coast. A highly awarded national car and home insurer, and 2020 winner of the Mozo's People's Choice Awards for Excellent Customer Service and Outstanding Customer Satisfaction.
- Terragen Biotech an agricultural biotech company that manufactures a range of biological products to offer sustainable solutions to farmers.

- Innovation Center Sunshine Coast a major hub for entrepreneurial activity in the area that provides mentoring and support to mature and emerging startups and a collaborative environment where they can scale. Incubator and accelerator programs, along with a range of other high-end services, are available to members and stakeholders.
- Business Mentoring Program a non-for-profit program established with the SunshineCoast Chamber Alliance to support the development of small businesses on the Sunshine Coast and empower them to succeed.

### Seoul









"Seoul is a lively dreamland where creative ideas well up endlessly and a soul-filled city where anyone can become the hero of today." CEO Hyun Woo Kim of Seoul Business Agency.

#### **Ranking Trend**

Seoul remains in the global top 30, ranking 25th in the 2022 Global Startup Ecosystem Index. Seoul also keeps its status as a regional hub, ranking 9th in Asia.

#### **Promising Industries**

⇒ Seoul overperforms strongly in two industries, ranking 12th worldwide in Hardware & IoT and 13th in Social & Leisure. Its third strongest industry is Ecommerce & Retail, where Seoul ranks 18th worldwide. Seoul also ranks 21st worldwide in Foodtech, where it rose 63 spots from its 2021 ranking.

#### **Reasons to Relocate**

- Ranked 11th in the Liveable Cities Index 2021
- Second fastest internet speed in the world
- ⇒ The value of new venture capital investments in South Korea amounted to about 9.2 trillion won (\$7.7 billion), up from about 6.9 trillion won in 2020.

#### **Public Sector Incentives**

- ⇒ Foreign startup support: the government offers grants through programs like the K-Startup Grand Challenge, which includes provisions of visas for founders.
- Visas: The government announced in January 2022 that a special startup visa category is in the pipeline.
- Tax breaks for angel investors and VCs: Tax deduction will be up to 50% for investments of up to 50 million won. Tax breaks that were earlier available to only high-risk ventures were expanded to include startups that are less than three years old.

➡ Future plans: In July 2021, the South Korean government announced Korean New Deal 2.0, which envisages an increased fiscal investment planned to be made by 2025 of 220 trillion won. Digital New Deal is part of this, and the government plans increased investment in the digital economy, metaverse, cloud computing, blockchain, and convergence.

#### **Notable Startups**

- → Aprogen a biologics platform company focused on developing and manufacturing biosimilar products, new protein drugs, and bispecific antibodies.
- **Dunamu** provides a wide range of innovative services with a focus on fintech and blockchain.
- Yanolja a Korean online booking and travel accommodation platform that provides spacebased on-demand services.

- ➡ TIPS (Accelerator Investment-Driven Tech Incubator Program for Startup) is designed to identify and nurture the most promising startups with innovative ideas and groundbreaking technologies.
- ➡ FUTUREPLAY is a combined incubator, accelerator, and venture capital. They have created a sanctuary where inventors, entrepreneurs, and early-stage businesses find the necessary elements to launch, grow, and succeed.
- My Workspace is creating an optimal environment for early-stage startups to focus on their work without burden.

# Kingston



### KINGSTON

- Economic Development -





Cost of Living: 43% cheaper than London



**Internet Speed 100** Mbps

"It's great to see Kingston continue to rank well in the StartupBlink Ecosystem report," says Mayor Paterson. "This kind of ecosystem doesn't happen by accident - it requires partnership, collaboration, and strategic initiatives to build an atmosphere that fosters innovation and entrepreneurship - and I'm very proud of the investments made community-wide to achieve this."

#### **Ranking Trend**

 Kingston ranks 183rd globally and 9th in Canada in the 2022 Global Startup Ecosystem Index.

#### **Promising Industries**

Kingston overperforms in the Energy & Environment industry where it ranks 59th globally. Other strong verticals include Healthtech and Hardware & IoT at 79th and 85th respectively.

#### **Reasons to Relocate**

- #1 city for women in Canada
- #1 fastest wireless networks in North America
- #1 for new angel investment networks in Canada
- #1 in foreign direct investment strategy for small cities in North America
- High level of public subsidies and incentives for startups, including R&D and hiring.

#### **Public Sector Incentives**

- FedDev Ontario Health Innovation: FedDev recently announced a \$3 million investment into the Kingston Health Innovation sector to support start-ups.
- ➡ FedDev Ontario WE-CAN Project: Queen's University is receiving a \$3.5 million investment to support and empower existing and aspiring woman-identifying entrepreneurs, through the provision of tools, resources, expert mentors, networks, and building of community, to expand existing businesses and to launch new ventures.
- The Mayor's Innovation Challenge: Hosted by Kingston's city hall, the Innovation Challenge is an event focused on challenging startups to solve Smart City challenges. Kingston invests in

- the winning teams to give back to the startup ecosystem, creating a positive feedback loop for entrepreneurship.
- The Kingston-Syracuse Pathway: This is a collaboration focused on the relationship between economic development, Queen's University in Kingston and the universities in Syracuse, New York, that allows for a regional economic development strategy for startups especially in health innovation and cleantech.

#### **Notable Startups**

- ⇒ Li-Cycle: Founded in 2016, Li-Cycle (NYSE:LICY) has developed technologies that can recover up to 95% of all the materials in lithium-ion batteries in an environmentally and economically sustainable manner. Kingston has played an essential role in Li-Cycle's growth, partnering with Green Centre Canada and Kingston Process Metallurgy to move its patented Spoke & Hub Technologies™ from concept to commercialization
- ➡ Elentra: Originally developed at Queen's, Elentra is now used around the world. A cloud-based teaching aid, scheduling system, and assessment tool all-in-one, Elentra empowers academic institutions to train the next generation of health-care professionals to better serve their patients and advance medical research using the only complete online platform built by and for health sciences schools.
- ➤ King's Distributed Systems: Founded in 2017, Kings Distributed Systems (KDS) has developed a web-based solution, based on ubiquitous web standards, that can borrow a computer's idle computing capacity and make it part of a distributed computing system.

- The <u>Dunin-Deshpande Queen's Innovation</u>
   <u>Center</u> (DDQIC) supports the innovation and entrepreneurship activities of students and entrepreneurs of the Kingston community through incubators, accelerators, and workshops.
- ⇒ KPM-Accelerate supports chemical start-ups and accelerates their development on the road to the commercialization of their technology.
- ⇒ The GreenCentre Canada Mobilize Program supports innovative companies with handson technology development services to accelerate their recovery and growth following the pandemic. Projects are tailored to thecompany's needs and costs are subsidized by the Province of Ontario, which means businesses can focus on innovation.



# Bogota







70% cheaper than London



**Internet Speed 13.73** Mbps

For the Bogotá Chamber of Commerce, it has been a priority in recent years to promote the positioning of Bogotá as the "Capital of entrepreneurship and innovation" in Latin America, accompanying those who want to contribute their talent in solving needs and taking advantage of the opportunities that the market offers, by promoting the creation and strengthening of startups that incorporate knowledge and technology and the development of a productive development agenda based on knowledge and innovation.

#### **Ranking Trend**

Bogota ranks 70th globally, increasing 7 spots, and 4th in South America in the 2022 Global Startup Ecosystem Index.

#### **Promising Industries**

Bogota overperforms in the Ecommerce & Retail industry where it ranks 35th globally. Bogota is also overperforming in the Transportation industry, ranking 41st globally, up 44 spots from last year.

#### Reasons to Relocate

- Its strategic position makes it a great city not only for Colombia but for the whole Latin America region.
- According to the Global Entrepreneurship Monitor (GEM), Colombia, the best country in Latin America to start a business in 2022.
- According to the World Bank's Doing Business 2020 report, Colombia ranks fourth among the best countries to do business in Latin America, after Chile, Puerto Rico, and Mexico.

#### **Public Sector Incentives**

- INNpulsa Colombia: An accelerator launched by the government of Colombia that leads the Cemprende program, which facilitates the connection between academia, private companies, the State, and society
- Invest in Bogotá: A private-public agency that seeks to support investors who are exploring opportunities in Bogotá to strengthen the entrepreneurial ecosystem.
- District of Science, Technology and Innovation District of Bogotá-Region: Launched in March 2022 by the Bogotá Chamber of Commerce,

- Corferias, the Mayor's Office of Bogotá, the National Government, and the Government of Cundinamarca.
- ⇒ FITIC Fund: An initiative of the Mayor's Office that promotes innovation, digital transformation, the use of 4.0 technologies, and the adoption of a collaborative culture.

#### **Notable Unicorns and Startups**

- Rappi: is a consumer tech company that specializes in providing online delivery services.
- Habi: a platform that through the use of technology and artificial intelligence offers the possibility for users to sell their property
- ⇒ Frubana: Application that connects the farmer with the final consumer
- Tul: offers an application where users can buy hardware and construction products

- Bogota Chamber of Commerce: Offers mentorship programs during all stages of pre-seed until investment as Mujeres Tech accelerator and capital raising
- Rockstart: Helps early-stage startups expand their business and get ready for investment
- ⇒ HubBog: the "Campus of Startups" provides networking opportunities, acceleration programs, an Angel investors network, and international mentorship, as well as organizing workshops and virtual events
- Connect Bogotá Region: facilitates communication between universities, entrepreneurs, and the State

## **Kyoto**











Cost of Living: 42% cheaper than London



**Internet Speed 33** Mbps

"Ecosystem in Kyoto is developing... fast. The Kyoto government, city hall, and private sector facilitate the development of our ecosystem, in accordance with the national strategy to compete with the world"s best. For those who are interested in Kyoto's ecosystem, we have launched a Slack community, "Startup Capital Kyoto". Please join our ecosystem in Kyoto!" - Naofumi Makino, Chief Director, JETRO Kyoto"

#### **Ranking Trend**

 Kyoto now ranks 182nd globally and 3rd in Japan in the 2022 Global Startup Ecosystem Index.

#### **Promising Industries**

Kyoto overperforms in the Energy & Environment industry where it ranks 64th globally, up 35 spots from last year's rankings. Kyoto is also strong in Hardware & IoT rankings at 87th globally, up 20 spots from last year.

#### Reasons to Relocate

- Voted Best Big City in the world in 2020
- The perfect city for creating originality, surrounded by history, culture, and art
- Kyoto innovation belt for connection between research, innovation centers, and technology parks.

#### **Public Sector Incentives**

- ⇒ <u>JETRO Kyoto</u>: Helps entrepreneurs register in Kyoto with services like mentoring and rental office support.
- Kyoto Startup Visa: Launched in April 2020 by the Kyoto Prefecture, this visa allows foreign entrepreneurs to work and establish their business in Kyoto with an expedited visa.
- ⇒ Reduction of real estate acquisition tax by up to 50%, subject to job creation, for enterprises establishing or expanding plants in designated areas promoting manufacturing clusters.

⇒ Incentives: The Kyoto city government provides a subsidy to promote office establishment: 10% of invested capital in fixed assets (excluding land) and an employment subsidy of 100k -500k yen.

#### **Notable Unicorns and Startups**

- Thyas: Thyas is an early stage Japanese biotechnology company developing autologous adoptive immunotherapy with induced pluripotent stem cells (iPSC)-derived killer T cells for the treatment of cancers and chronic viral infection.
- ➡ Flosfia: is a spin-off from a research of Kyoto University, specializing in film-formation by mist chemical vapor deposition (CVD).
- ➡ Hacarus: specialize in Sparse Modeling using their proprietary AI Engine provides best-inclass results and is compatible with small data sets.

- Keihanna Global Acceleration Program Plus: a fantastic accelerator program that is open to foreign entrepreneurs in Kyoto.
- Plug and Play Kyoto: conducts industryfocused accelerator programs in various locations around the world including Kyoto
- Monozukuri Ventures: help the world's entrepreneurs rapidly deliver high-quality products to the market, regardless of production volume.

## Mogadishu







"Somalia continues to innovative and grow in the start-up ecosystem. Key drivers to this have been a young and eager population that is pioneering opportunities that can benefit their communities, especially related to software and renewable energy." - Minister Hamze Said Hamze, Ministry of Youth and Sports, Federal Government of Somalia

#### **Ranking Trend**

Mogadishu now ranks 764th globally and 7th in East Africa in the 2022 Global Startup Ecosystem Index.

#### **Reasons to Relocate**

- High software and data innovation
- Software as a Service (SaaS) is emerging rapidly in the country
- Great opportunities for renewable energy
- Lots of public investment opportunities
- Mogadishu is the most innovative startup ecosystem in Somalia

#### **Public Sector Incentives**

- Response Innovation Lab: Foster partnerships that develop, pilot, and scale innovations that overcome context-specific problems or barriers to the delivery of aid and community recovery.
- Somali Resilience Innovation Lab: An interagency partnership offering effective innovations to enhance the impact of humanitarian and development interventions to improve the resilience of the Somali people.
- The Ministry of Commerce and Industry of Somalia has launched the <u>Somali Business</u> <u>Registration System</u>. The new online system will significantly reduce the time required for a company to register.

#### **Notable Startups**

- OGOW: A startup that provides electronic medical records (EMR) and a practical management system designed specifically for hospitals and clinics in Somalia.
- Gulivery: A startup that provides a delivery service platform for order fulfillment in Mogadishu and Hargeisa.
- SolarGen: A regional renewable energy and water solutions provider. It is a distributor with strong technical expertise in the region.

- Innovate Ventures: Innovate Ventures is a leading Somali startup accelerator and earlystage startup fund. Their innovative accelerator program is a three-month intensive incubator that provides entrepreneurs support and investment opportunities.
- ⇒ <u>iRise</u>: An innovation hub in Mogadishu with the aim of building and empowering young entrepreneurs. It offers creative workspaces as well as fully furnished office spaces to help startups innovate and network.

## Cali







Cost of Living: 76% cheaper than London



Internet Speed 22.21 Mbps

"The diversity of our business fabric is our greatest strength, since business and economic development is built on the networks and chains that already exist, although our geography and location, our infrastructure, the excellence of our universities and the current good articulation also help us. Between public and private."

#### **Ranking Trend**

Cali ranks 293rd globally, increasing 5 spots, and 3rd in Colombia in the 2022 Global Startup Ecosystem Index. Regionally, Cali ranks 13th in South America.

#### **Promising Industries**

 Cali is strong in the Foodtech, Edtech, and Marketing & Sales industries.

#### **Reasons to Relocate**

- High level of support for startups by the public and private sector through various programs, projects, and services
- Offers a network of 213 mentors and 204 counselors to advise and guide startup projects and companies in their organizational challenges
- Cali has the third best university in Colombia and 59th in Latin America
- ⇒ Polux, the first venture capital network in Valle del Cauca, which connects entrepreneurs with resources and tools to make better use of capital. This initiative has managed to move more than \$14 billion between debt and investment.
- Cali and Valle del Cauca are technological regions by nature, offering large software development houses such as Carvajal, Siesa, Open, and Óptima.
- Cali is in the top 5 of cities in Colombia, and BIC companies committed to sustainability are generating new opportunities in the region.

#### **Public Sector Incentives**

- Invest Pacific: An initiative created by the cooperation of the public and private sector to promote investment in the Cali region.
- Cali Chamber of Commerce: The Cali Chamber of Commerce is committed to improving the infrastructure and support networks for small businesses and startups in an attempt to boost innovation throughout the region.
- Compromiso Valle: The result of collective and dynamic construction between citizens, companies of all sizes, and foundations that came together to find solutions to the realities that the territory faces as a result of the COVID-19 Pandemic. Through six priorities it will transform life projects and generate employment, income, food security, solid leadership, and training for the most vulnerable populations in the region.
- Cali Circular: A city development and management model that promotes transition towards the Circular Economy, which is managed through the Cali Economic Development Secretariat.

#### **Notable Unicorns and Startups**

- ➡ Truora: a Colombian user authentication startup that helps Latin American businesses onboard users via WhatsApp. It raised \$15 million in Series A funding in 2022, co-led by two Silicon Valley-based venture firms which valued the company at \$75 million post-money.
- ➤ WeKall: cloud corporate telephony simplifies the operation to one provider, saving up to 60% monthly in telephony operation.
- Tranqui: is a digital financial advisor that combines technology with financial planning to help people make better financial decisions.

- Stalle Impacta is a business scaling program led by the Cali Chamber of Commerce and the Bolívar Davivienda Foundation, which supports companies in their extraordinary growth, in order to promote the economic and social development of the region.

   Valle Impacta is a business scaling program

  In Bolívar Davivienda Foundation, which supports

  In Bolívar Davivienda Foundation

  In Bolívar Davivienda Fou
- Acelera Region: accelerator program that aids early-stage enterprises in their economic development and job creation. It focuses on ventures with the potential for rapid, profitable, and sustainable growth.
- ➡ El Lab: Innovation and coworking center developing the ecosystem of the Colombian Southwest.



## Yokneam







#### **Ranking Trend**

Yokneam now ranks 308th globally and 4th in Israel in the 2022 Global Ecosystem Index Report.

#### **Promising Verticals**

Yokneam is strong in the Health, Transportation, Foodtech, Edtech, and Energy & Environment industries

#### Reasons to Relocate

- Yokneam has an especially high concentration of companies who develop technologies which require longer term R&D, such as medical devices, semiconductors and network infrastructure.
- The high quality of life and lower cost of living attracts a slightly different type of entrepreneur and R&D professionals than in Tel Aviv.
- Yokneam is strategically located on all of the main roads connecting all of northern Israel to both Tel-Aviv and Jerusalem
- A recent government survey found that the percentage of academics in Yokneam's population was second only to Tel Aviv.

#### **Public Sector Incentives**

- Yokneam is a National Priority A area which increases the amounts of grants and funding available via the Israeli Innovation Authority, and reduces the requirements needed to receive that funding.
- ⇒ Four incubators (<u>Alon MedTech Ventures</u>, TerraLab Ventures, Youdim Pharmaceuticals, and CoLab Square) and two Co-Working spaces (Open Valley and Pitch) with mentoring and business development support.
- Innovation Visas Program for Foreign **Entrepreneurs** - Assists foreign entrepreneurs with the visa process.

#### Notable Unicorns and Startups

- Mellanox The most famous of Yokneam's network infrastructure and semiconductor startups - recently sold to NVIDIA for a reported \$7 billion.
- Given Imaging Non-invasive technology pioneer for gastro-intestinal diagnosis. The company is now part of Medtronics, whose R&D facilities in Yokneam continue to develop new products and applications.
- Ramon Chips Leader in high-performance computing in space that enabled development of the world's first software-defined satellites.

## Manama







Cost of Living: 52% cheaper than London



**Internet Speed 21.56** Mbps

"Technology-based start-ups have become drivers of economic change in Bahrain. They are reshaping economic diversification and shifting the national entrepreneurship narrative toward ideas that address concrete market needs and offer growth opportunities far beyond Bahrain." Dr. Jarmo Kotilaine, Chief Strategy & Data Analytics Officer, Tamkeen

#### **Ranking Trend**

 Manama ranks 329th globally, increasing 8 spots, and 10th in the Middle East in the 2022 Global Startup Ecosystem Index.

#### **Promising Industries**

Manama is strong in the Hardware & IoT,
 Marketing & Sales, and Social & Leisure industries.

#### **Reasons to Relocate**

- Ranked 1st on Skilled Labor in MENA based on the UN Human Development Index
- Streamlined business regulations with zero corporate taxes.
- One of the first in the MENA to accept blockchain and cryptocurrency
- Due to affordability and ease of access, Bahrain is a great entry point for startups looking to enter other Gulf Cooperation Council countries.

#### **Public Sector Incentives**

- Bahrain has adopted a new permanent residency visa, the Golden Residency Visa, which offers a more flexible and longer-term option to attract investors, entrepreneurs, and highly talented individuals
- Bahrain launched investment visas to investors with a temporary commercial registration certificate, allowing for 90-day visits through an online application
- Eligible enterprises can apply for Enterprise Development Support, incentive programs to support FDIs as well as Tech Support programs through Tamkeen if they meet the criteria, programs offered by Tamkeen include Tech Disruptors & GoDigital

- Bahrain has NO corporate tax and allows for 100% foreign ownership in their companies
- ➡ Enterprises hiring recent university graduates can receive a wage subsidy of up to 70%..

### **Notable Startups**

- Rain a crypto-asset services provider which helps people to buy and sell crypto safely online
- CoinMENA a crypto-assets trading platform where users can buy, sell, store, and receive digital assets safely and securely, as well as deposit and withdraw in their local currency.
- Infinios a fintech startups that provides Payment Services and Card Processors to businesses

- ⇒ Bahrain Fintech Bay one of the largest FinTechs Hub in MENA that incubates impactful FinTech initiatives through innovation labs, acceleration, and educational opportunities.
- Collective Hub a Community Co-Working space for both Startups and Investors under one roof
- Diwan a groundbreaking coworking space, incubator and business center.

## Gothenburg







Cost of Living: 41% cheaper than London



**13.73** Mbps

"Gothenburg is an entrepreneurial city with nearly endless possibilities for innovators to develop their ideas, test their concepts and find successful collaboration opportunities" CEO Patrik Andersson, Business Region Göteborg

#### **Ranking Trend**

 Gothenburg ranks 165th globally, increasing by 6 spots, and 3rd in Sweden in the 2022 Global Startup Ecosystem Index.

#### **Promising Industries**

Gothenburg mainly overperforms in the Energy & Environment and Hardware & IoT industries, where it ranks 83rd and 90th respectively.

#### Reasons to Relocate

- World class incubators offering workspace, incubation, and acceleration services for startups.
- Gothenburg houses many major Swedish manufacturers, including Volvo, AstraZeneca, and Erickson.
- ⇒ In 2019, 1/3 of Sweden's total R&D investments within the private sector were made in Gothenburg.
- ➡ Gothenburg is home to two top-ranked universities, as well as research institutes like SEEL, Al Innovation of Sweden, and RISE Research Institutes of Sweden.

#### **Public Sector Incentives**

- <u>Västra Götalandsregionen</u> offers financial support for start-up and SME companies
- ALMI offers loans at various stages of company development

#### **Notable Startups**

- Recorded future the world's largest intelligence company with impressive coverage.
- Heart Aerospace is developing an electric aircraft, the ES-19, an all-electric, 19-passenger regional airliner
- ⇒ Forza Football a platform that features football live scores, lineups, video highlights, and more

- Chalmers Ventures offers a wide array of programs suitable for aspiring entrepreneurs, technology innovators, and researchers at different stages in their development.
- GU Ventures provides support for quality assurance and business development of early-stage projects and companies in the life science and technology sectors.
- Mobility X-Lab offers startups a fast-track into a potential strategic partnership with six industry partners

## **Pittsburgh**

INNOVATE | PGH





Cost of Living: 32% cheaper than London



Internet Speed 96.23 Mbps

"Pittsburgh has seen huge successes in robotics and AI that have attracted new investment and new opportunities for our ecosystem. We are on the rise and continue to be a great place to start and build companies." - Jason Griess, Ecosystem Director at InnovatePGH

#### **Ranking Trend**

Pittsburgh ranks 58th globally, up by 15 spots, and 23rd in the United States in the 2022 Global Startup Ecosystem Index.

#### **Promising Industries**

→ Pittsburgh overperforms in the Edtech industry where it ranks in the global top 30 at 17th.

#### **Reasons to Relocate**

- Pittsburgh is home to one of the nation's most robust engineering talent pipelines, which has fueled national prominence in robotics, AI, machine learning, and life sciences.
- The affordable cost of living makes it an attractive prospect to start and grow businesses and families.
- ⇒ The city is home to numerous universities, several of which have top research technology programs.

#### **Public Sector Incentives**

- ⇒ An incentive program that provides tax credits to for-profit companies less than eight years old operating within specific targeted industries within the boundaries of a Keystone Innovation Zone (KIZ).
- ⇒ Pennsylvania offers a 25% Tax Credit to films that spend at least 60% of their total production budget in the Commonwealth.

#### **Notable Startups**

- Aurora Innovations a self-driving vehicle technology company known for developing the Aurora Driver, a computer system that can be integrated into cars for autonomous driving.
- ⇒ Argo AI builds software, hardware, maps, and infrastructure that powers self-driving vehicles.
- Duolingo a language-learning website and mobile app.

- Ascender helps businesses of all types in the Pittsburgh region start and build a business through education and connectivity.
- Innovation Works focused on growing and connecting the local startup ecosystem.
- LifeX a capital growth company that de-risks early-stage life sciences companies in terms of time, resources, and investment.

## **Edmonton**







Cost of Living: 32% cheaper than London



**Internet Speed 28.9** Mbps

"Edmonton is establishing itself as a global innovation capital," said Innovate Edmonton CEO Catherine Warren. "We were recently named as North America's fastest growing tech sector and third in Canada for VC investment supported employees."

#### **Ranking Trend**

Edmonton ranks 140h globally and 7th in Canada in the 2022 Global Startup Ecosystem Index.

#### **Promising Industries**

Edmonton overperforms in Energy & Environment, ranking 49th globally. Other strong industries include Foodtech and Health, where it ranks 60th and 85th respectively.

#### **Reasons to Relocate**

- ➡ With over 930 startups/scaleups in the region and 20 support institutions & accelerators for the local ecosystem, claims to have the fastest-growing tech sector in North America (from the CBRE's Scoring Tech Talent report).
- ➡ Edmonton ranked third in Canada for employees supported by VC investment in 2021. Industries supported were primarily in ICT, life sciences, and agribusiness. (Canadian Venture Capital & Private Equity Association, Canadian Venture Capital Market Overview 2021 Year in Review).
- The average business rental cost is \$20.65 CDN/ Sq. Ft.
- Canada is the 5th largest economy and the northernmost city in North America.
- Young, educated, and growing talent pool: Edmonton has 6 post-secondary institutions with more than 130k students and is Canada's secondyoungest and fastest-growing population.

#### **Public Sector Incentives**

- Edmonton has the lowest tax rate in Canada at 8%, and a combined federal/provincial tax rate of 23%. It has no machinery and equipment tax; no payroll or capital tax; no municipal business tax.
- ➡ Fundraising SWAT Team Program: in partnership with Startup TNT and Innovate Edmonton, provide up to 100 hours of hands-on investment preparation to companies that are raising \$500k-\$2M (beyond friends and family).

- → International students can stay in Canada and work for 3 years post-graduation.
- ➡ Experts on Demand Program by Innovate Edmonton: Growth stage companies will be matched with one of 100+ experts with international representation who will provide 100 hours of one-on-one and industry-specific business coaching.

#### Notable Startups

- Jobber Canada's fastest-growing company with a \$60M investment in 2021
- → Areto Labs recent \$10m investment from the ScaleGood Fund
- Samdesk received \$13.5m in Series A funding in 2021

- Startup Edmonton ranked Canada's 2nd best accelerator by the Narwhal Project
- 4 new accelerators came to Alberta in 2021: <u>Alberta Accelerator by 500 Global, Community Safety & Wellness Accelerator</u> by Alchemist, <u>Plug and Play Alberta</u>, and <u>Alberta Catalyzer</u> (pre-seed Accelerator).
- ⇒ Alberta Women Entrepreneurs a not-for-profit organization dedicated to helping women achieve their entrepreneurial aspirations. AWE provides access to capital, connections, and capacity through unique programs and services.
- ➡ Health Innovation Hub: support for innovators and entrepreneurs to commercialize health and life sciences innovations through programming support, access to space and training resources, coaching and consulting support, and connections to peers and advisors.

## **Madrid**







Cost of Living: 48% cheaper than London



**Internet Speed 96.23** Mbps

"Madrid Region model", with low taxes, little intervention, and legislation in favor of entrepreneurship, innovation and investment: "Today we are the sixth most attractive region in Europe for technology startups (...) The Community of Madrid brings together 75% of all foreign investment in Spain, which makes it the leader in business confidence for investors from other countries" Isabel Díaz Ayuso, President of the Community of Madrid

#### **Ranking Trend**

Madrid ranks 50th globally and 2nd in Spain in the 2022 Global Startup Ecosystem Index. Regionally, Madrid ranks 10th in Western Europe.

#### **Promising Industries**

Madrid overperforms in the Software & Data industry at 30th globally, up 14 spots from last year's rankings. Madrid is also strong in the Energy & Environment, Edtech, and Marketing & Sales industries, ranking 34th, 37th, and 41st respectively.

#### Reasons to Relocate

- One of the highest concentrations of multinational corporations in the region
- Main startup bridge between Europe and Latin America
- ⇒ Ranks as the 2nd best European region for employment in the high-tech sector
- In 2020, Madrid was the 4th best European city in number of VC investment rounds.

#### **Public Sector Incentives**

- ⇒ Foreign entrepreneurs who wish to set up their startup in Spain can apply for an entrepreneur visa which grants two years of residency
- ⇒ Spain has a 25% corporate tax rate within the Eurozone; incentives and exemptions this can reduce the effective tax rate to around 20%
- Research and Development activities can make a company eligible for up to 42% corporate income tax credit

⇒ Reduction of up to 60% of positive income from the transfer of patent usage rights and other intangible assets.

#### Notable Startups and Unicorns

- Cabify one of Spain's leading unicorn companies, Is a mobility technology platform, already operating in 12 countries and serving more than 65,000 businesses. It became a unicorn in 2018 and has a market valuation of \$1.4 billion.
- Idealista a famous real estate portal born in Madrid.
- ⇒ Allfunds one of the world's leading wealthtech companies whose services include big data and analytics, portfolio tools and reporting, research, and regulatory services. Allfunds currently has the largest fund distribution network in the world, and offers access to the largest network of mutual funds and ETFs globally.

- <u>Fundación Parque Científico de Madrid</u> offers offices and laboratories for scientific and technological entrepreneurs
- Demium create startups from scratch, enabling local entrepreneurs to build valuable and lasting companies.
- □ La NAVE home to the Madrid Innovation Campus, an area covering 12,317 square meters used for development activities

## **Antwerp**







Cost of Living: 44% cheaper than London



Internet Speed 83.16 Mbps

"Antwerp is one of the most attractive cities for international startups or scaleups to grow. 16 incubators and accelerators, 3 innovation hubs, numerous VC's, knowledge institutions, talent... all the elements of an ecosystem are present in abundance. And we as a government facilitate and support this dynamic. We are Open for Business," says Erica Caluwaerts, vice-mayor for Economy and Innovation.

#### **Ranking Trend**

Antwerp ranks 255th globally in the and 3rd in Belgium in the 2022 Global Startup Ecosystem Index.

#### **Promising Industries**

Antwerp is strong in the Hardware & IoT, Marketing & Sales, and Social & Leisure industries.

#### **Reasons to Relocate**

- Central and Strategic location Antwerp, your gateway to Europe and the rest of the world. With 60% of European purchasing power in a 500km range, the city is the shortest route to major European industrial and consumer markets.
- ⇒ Economic power The superb connectivity of Antwerp, together with the strong business drive of its people, makes Antwerp a major economic hub, boasting the second largest port in Europe with its biggest chemical cluster, as well as Europe's largest diamond trade center and Belgium's favorite retail destination.
- Strong International Orientation Antwerp is the best large European city for investors, according to Financial Times.
- Innovation Power House The city of Antwerp is firmly committed to foster ecosystems for innovation and became a hotspot for digital innovation, circular economy and health.
- Unbeatable quality of life Being a cultural and creative hub, 97% agree that Antwerp is a great place to live (Eurostat).
- ⇒ Vast pool of talent The city welcomes more than 50,000 students annually to its numerous institutions of higher education.

#### **Public Sector Incentives**

- Startup.Flanders, new and open startup database, a partnership between Flanders Investment & Trade and Dealroom, designed to internationally promote the Flanders startup ecosystem with entrepreneurs and investors. Flanders and Antwerp have created a business-friendly climate for companies giving grants, funding opportunities, and tax or social security incentives.
- ➡ The Beacon, headquarter for Antwerp's digital innovation community (AI, IOT), catalyzes innovation among its founding partners and strengthens ties with technology companies to develop solutions for industry, logistics, and smart cities.
- ➡ BlueChem, one of the few incubators in Europe that focuses on sustainable chemistry. Offers infrastructure, financial, and go-tomarket services for startups supported by the BlueChem Kickstart fund. All startups are being connected to Innovation Fund, a VC from the chemical sector.

### Notable Unicorns and Startups

- Rombit, developed in and still a member of the Beacon community, Rombit is an IoT solutions startup used in heavy industry and dockwork.
- Venly is a blockchain-agnostic technology provider startup with wallet, NFT, and marketplace solutions serving 2M users.
- Unifly, provider of an unmanned traffic management (UTM) platform allowing the safe integration of drones into the airspace. Unifly initially operated as a spin-off company of VITO.

- ➡ Imec.istart imec's open accelerator program, offers tech startups pre-seed funding and tailored support to succeed and grow globally. For the third year in a row, ranked the #1 university-linked business accelerator in Europe, and has invested in more than 260 companies.
- Start it KBC #1 largest start-up ecosystem in Belgium. Offers a strong acceleration program where startups can count on mentorship, expertise, custom workshops, and tailored funding advice. Supports more than 120 new startups each year.
- ▶ Plug and Play World's leading innovation platform and first hub for innovation in the maritime sector. With a strong group of partners (city and port Antwerp-Bruges) and industry leaders, this program aims to shape productive collaborations with startups and develop Antwerp as a sustainable global hub for innovation activities.

## Central Asia Regional Economic Cooperation (CAREC) Region Spotlight





In this section we analyze the startup ecosystem of CAREC. Many of the countries in this region have not received enough attention and offer massive potential for startup ecosystem growth in the future.

The Central Asia Regional Economic Cooperation Program (CAREC) is a partnership of 11 countries and development partners.

The eleven countries in the region are: Afghanistan, Azerbaijan, China, Georgia, Kazakhstan, Kyrgyzstan, Mongolia, Pakistan, Tajikistan, Turkmenistan, and Uzbekistan.

Note that throughout this document, we use the names Kyrgyzstan and China, referring to the Kyrgyz Republic and to the People's Republic of China respectively.



As we can see from this graph, the region comprises two large countries by population (China and Pakistan) and 9 small to medium-size ones. We can also see that there are certain outliers in GDP per capita (notably Kazakhstan and Turkmenistan, besides China). This speaks to an economically heterogeneous region, as well as in other aspects such as language, religion, and culture.

As for startup ecosystems, in 2022 seven countries in the CAREC region were ranked in the global top 100. China and Pakistan lost 3 and 1 spots, to be ranked 10th and 76th, respectively. On the positive side, Georgia (73rd), Kazakhstan (74th), Mongolia (81st), and Azerbaijan (85th) increased by 7, 2, 7, and 4 spots respectively. This year, Georgia climbed two positions up the CAREC ranking, overtaking Kazakhstan and Pakistan, and positioning itself as the second highest ranked country in the CAREC region, topped only by China. Kyrgyzstan appeared in the rankings for the first time this year at 100th in the world. Afghanistan, Tajikistan, Turkmenistan, and Uzbekistan are still nurturing seed activity levels, and hence have not made the top 100 countries list. It should be noted that Uzbekistan's capital, Tashkent, is ranked in the global top 1000 cities and currently enjoys positive momentum.

At the city level, there are 54 cities from CAREC in the top 1000, with clear dominance from China, which represents 44 of them. As an additional sign of the success of the Chinese startup ecosystem, 18 cities in the regional top 20 are Chinese, the other 2 being Karachi and Lahore from Pakistan, ranked 291st and 305th respectively. As such, Karachi and Lahore are the two highest ranked non-Chinese CAREC ecosystems. Pakistan has one more city in the global top 1000 (Islamabad at 438th). The remaining 7 ranked ecosystems in the region that made the global top 1000 are: Nur-Sultan, Kazakhstan (343rd), Tbilisi, Georgia (382nd), Baku, Azerbaijan (443rd), Ulaanbaatar, Mongolia (472nd), Almaty, Kazakhstan (633rd), Bishkek, Kyrgyzstan (732nd) and Tashkent, Uzbekistan (746th).

As a great sign for the region's momentum, six of these seven ecosystems have good momentum, climbing up the index. Nur-Sultan is up 14 spots, Tbilisi 25 spots, Baku 12 spots, Ulaanbaatar 19 spots, Tashkent 136 spots, and Bishkek made its debut, entering the ranking for the first time at 732nd, establishing itself as CAREC's 47th highest ranked city and 9th highest non-Chinese city.

Regional Rank	Country	Global Rank	Global Rank Change
1	China	10	-3
2	Georgia	73	+7
3	Kazakhstan	74	+2
4	Pakistan	76	-1
5	Mongolia	81	+7
6	Azerbaijan	85	+4
7	Kyrgyzstan	100	new

# CAREC COUNTRIES REGIONAL RANKING

### Top investments & Initiatives in the Startup Ecosystem of the region

From 2001 until the end of 2020, \$40 billion worth of investments in key sectors such as transport, trade, and energy have been made in the CAREC region through financing coming from the ADB, development partners, or CAREC governments. While these figures do not represent direct investments specifically in the startup ecosystems, they contribute to the overall economic stability and infrastructure development in the region. These, alongside digital literacy, access to talented workers, and accelerators are key elements in laying the foundation for startup development. Stimulating trade and sharing good practices between member countries is also an objective of CAREC.

Below are other great initiatives in the CAREC Region:

#### Mitigating the effects of the COVID-19 pandemic on the Startup Ecosystem

CAREC HACKATHON: The #DigitalCAREC Challenge is a part of a larger project aimed at mitigating the effects of the COVID-19 pandemic and boosting the economy through the Startup Ecosystems. The funding of the project (US\$ 1 million) is provided by the ADB and the Republic of Korea, e-Asia, and the Knowledge Partnership Fund. This project will further encourage the integration of digital technology and ICT in member countries.

CAREC Start-up Ecosystem Development Hub is planned to be a virtual platform for creative and innovative proposals in combating the negative impacts of COVID-19.

#### Creating Tech Parks

The establishment of tech parks in the CAREC region has had a positive effect in boosting competitiveness of the economy, stimulating the private sector and increasing the number of hi-tech companies. Notable examples include Astana Hub, Azerbaijan Hi-tech Park (HTc), China's Zhongguancun Science Park, and the National Information Technology Park in Mongolia.

The creation of these parks attests to CAREC's determination to simplify bureaucracy, deregulate, and support startup ecosystems in the region. Many of these tech parks (e.g. the High Tech Park in Kyrgyzstan) offer special tax breaks or incentives for their residents.

## Introducing Our Global Data Partners

## crunchbase

<u>Crunchbase</u> is a leading provider of private company prospecting and research solutions. 70 million users, including salespeople, entrepreneurs, investors, and market researchers, use Crunchbase to prospect for new business opportunities. Companies all over the world rely on Crunchbase to power their applications, making over 6 billion calls to the Crunchbase API each year. To learn more, visit <u>about.crunchbase.com</u> and follow Crunchbase on Twitter @crunchbase.



<u>Semrush</u> is a trusted data provider whose data on search volume, correlations, website traffic, and digital trends is used by media outlets around the world. Comprising over 50 products, tools, and addons related to online visibility management, and collecting search data for 140 countries, Semrush provides statistics that can enhance any data-driven content with up-to-date information and data.



With more than one million data sets, Statista is a global leader in data platforms for strategic market analysis, statistics, and editorial research results. Statista.com offers direct access to data on 80,000 topics and 170 industries from over 22,500 sources. 1.5 million registered users get access to reliable, quantitative facts, which are compiled according to scientific standards from aggregated data, exclusive secondary sources, and surveys.



Meetup counts 330,000+ groups across 190 countries generating around 34 million Meetup event RSVPs per year and over 75,000 Meetup events every week. More specifically, over 10 million Meetup members have expressed interest in startup businesses though the Meetup platform. StartupBlink is a proud customer of Meetup Pro, allowing us to build and manage a large network of startup communities in dozens 15 different locations worldwide.

## Introducing Our Global Data Partners









The Joint <u>United Nations Programme on HIV/AIDS</u> (UNAIDS) leads and inspires the world to achieve its shared vision of zero new HIV infections, zero discrimination and zero AIDS-related deaths. UNAIDS unites the efforts of 11 UN organizations and works closely with global and national partners towards ending the AIDS epidemic by 2030 as part of the Sustainable Development Goals.

The Health Innovation Exchange (HIEx), launched by UNAIDS in 2019, is a multilayered platform for facilitating innovative solutions for health, particularly in the global South. It connects countries and systems, identifies their health-specific priorities and works to ensure that investments move towards impact for the SDGs. The HIEx forges a community of political leaders, decision makers, health experts, technology and science leaders, innovators, investors, accelerators and implementers and all those who can share, explore and synergize efforts for sustainable impact.

#### The Central Asia Regional Economic Cooperation

(CAREC) Program is a partnership of 11 countries and development partners working together to promote development through cooperation, leading to accelerated economic growth and poverty reduction. It is guided by the overarching vision of "Good Neighbors, Good Partners, and Good Prospects." The CAREC Program is promoting the region's startup ecosystems as part of its digital initiatives.

SAP.iO Foundries is SAP's global network of equityfree startup accelerators that are the fastest way for founders to launch a relationship with SAP. SAP.iO Foundries provides technical and go-tomarket support to help startups integrate with SAP and accelerate their entry into a curated inclusive ecosystem whose offerings can be easily accessed and deployed by SAP customers. Since its founding in 2017, SAP.iO Foundries has accelerated over 400 startups.

## Introducing Our Global Data Partners





Coworker is the world's largest network and marketplace for coworking spaces. With 19,000+ spaces, Coworker enables people to discover, review, and book coworking spaces in more than 172 countries. Top companies such as Spotify, Uber, Shopify, Salesforce.com, Paypal, Upwork, and Pfizer, along with 3 million professionals, have used Coworker to find desks, meeting rooms, and private office space around the world.

Findexable is home to the world's first Global <u>Fintech Index</u> – a global database that identifies emerging hubs, spotlights new innovators, and supports the growth of progressive, inclusive financial services everywhere. Findexable maps, tracks, and benchmarks the world's private market fintech firms so investors can find them, institutions can buy from them, and fintech firms can benchmark themselves against peers.

## StartupBlink Team Members •••••

Our incredible team works tirelessly to track startup ecosystem developments across the globe and stay at the forefront of startup research. In this section we will introduce the team that made this report possible.



### Eli David

#### **CEO**

Eli is a certified public accountant and economist, and is infinitely curious about startup ecosystems and their impact on countries and cities. Eli has work experience in companies like KPMG and BDO, and now leads StartupBlink projects with dozens of ecosystem developers and international organizations. When Eli is not working on StartupBlink, he is blogging and podcasting about remote work and the digital nomad lifestyle at <a href="Mecomposition-needed-normal">BecomeNomad</a>.



### Katrin Calledo

### Partnerships and Product Manager

An avid reader and explorer who is passionate about making meaningful connections, Katrin holds a Masters degree in Behavioral Economics from Université Paris 1 Panthéon-Sorbonne. She has over five years of experience in market research, client relations, and product management.



## Michal Weyna

#### Head of Research

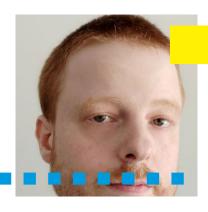
Michal is on a mission to observe, adapt and innovate with insights that improve quality of life for individuals and communities. Michal holds a Master's Degree from the Warsaw School of Economics and has over 15 years of experience in government, startup, and corporate sectors. A keen traveler, he has been captivated by the geographical dimension of the rankings. In his blog, he gives an intriguing twist to travel statistics.



#### Dr. Ziv Baida

#### **Report Editor**

For the second year in a row, Ziv Baida has been the editor of this report. He holds an MSc degree in computer science, a PhD degree in information management, and has almost 20 years of experience in designing, selling, and delivering data, technology, and digital solutions around the world. He has a healthy disrespect for the status quo, and always enjoys a good discussion about innovation, especially technology-enabled innovation. If you're looking for someone to challenge your thinking, Ziv is the man to see; he'll expect that you return the favor and challenge his thinking too!



## Peter Timoshevsky

#### Web Developer

Peter is a full-stack web developer with a strong focus on maintainable architecture and scalable infrastructure. He is currently working hard on supporting and improving the StartupBlink platform.



## **Mahmod Shamsi**

#### **Head of Business Development**

Mahmod is an educator, entrepreneur, and a business acumen with an Impact MBA from Colorado State University. A Buzkashi Player "Chapandaz", and a Fulbright scholar with a decade of experience in higher education, public policies, and business management. As a Global citizen, fluent in 6 languages, he is always looking forward to connect in multi cultural environment and share his passion about building impact driven ventures.



#### Naomi Costa

### Content and Marketing Manager

Naomi is an outdoor enthusiast, avid reader, and curious learner. She is currently responsible for finding out what makes each startup ecosystem unique and translating that information into meaningful narratives. Naomi is also working towards her Masters degree in Science, Technology, and Innovation in Public Governance.



#### **Ghers Fisman**

#### Data Manager

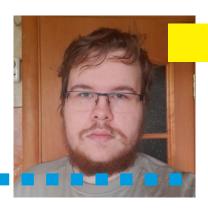
Ghers is very interested in startups and everything that surrounds them. He enjoys climbing mountains and reading books. He holds degrees in both Economics and Finance from Venezuela (his home country) and Spain (where he currently lives), and has professional background in Corporate Finance.



### **Omar Bahaya**

#### Startup Ecosystem Development Consultant

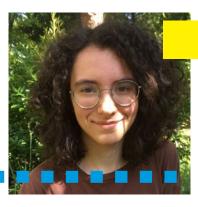
Omar's consulting skills come from a deep knowledge of "how the system works," what entrepreneurs need, why they succeed, and why they fail. He also teaches Business Administration, is a fully qualified startup mentor, and has enjoyed multiple positions in the Association of Young Business Entrepreneurs in the Canary Islands (Spain).



#### Yaroslay Shelestoy

#### Data Analyst

Yaroslav is passionate about all things regarding data, the more the better. He holds a degree in Analytical Economics from Belarusian State University and various experience with analytical programming languages. In his free time he enjoys listening to niche music genres and deepening his knowledge in computer science.



## Ebrar Sünör

#### Data Researcher

Ebrar is a sociology student living in Ankara, Turkey, who is deeply interested in economics, cultural development, and developing startup ecosystems. She loves camping, long walks in the woods, and urban farming. She also enjoys art house movies and taking analogue pictures.



#### Vallabh Rao

#### **Content Writer**

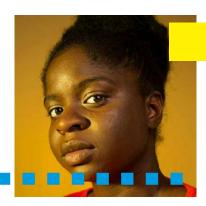
Vallabh is a marketing and communications professional with more than 12 years of experience working with startup media, conferences, and social enterprises. Currently living in Lithuania, he is an avid traveler. He has been to more than 50 countries and has lived in Cambodia, South Korea, China, Israel, and the U.S.



## Lana Ugrčić

#### **Content Writer**

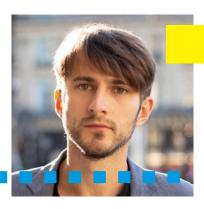
Lana is passionate about startups and developing startup ecosystems, both personally and professionally. She has tremendous experience in developing startup support programs and projects that gather different ecosystem stakeholders, with a focus on the Central and Eastern Europe (CEE) region. She is also an organizer of a number of startup events that connect startups, investors, serial entrepreneurs, and business advisers. Lana has been running several university business incubation programs for the past 6 years, and has enjoyed the cooperation of multiple leading international VCs, investors, accelerators, business support organizations, and other relevant stakeholders.



## Tshima Nemurangoni

#### Project Manager

Tshima is a South African who is a strong believer in using entrepreneurship as a tool to change developing economies. Her interests lie in building robust startup support structures to aid in business growth. She is in her final semester of her master's degree in Enterprise Development and Entrepreneurship.



### Slavik Fokin

#### **Art Director**

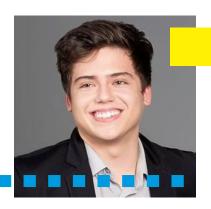
An award-winning creative director, <u>Slavik Fokin</u> helps to launch innovative startups and deliver value to their customers by creating conscious design solutions and effective marketing communications. In this report, Slavik is responsible for visual aesthetics and solidifying the vision of the collective imagination of the team, who has worked on the report.



### Jubal McMillan

#### **Editor**

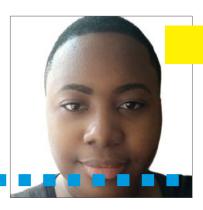
Jubal is a contract writer, editorialist, and authoring consultant based in California, USA. He has owned and operated nearly a dozen small businesses over the last 20 years, and is passionate about empowering future business owners in his community and around the world.



### **Martin Jordana**

#### **Project Manager**

Martin holds a marketing degree from De Montfort University, and has joined the team with over a year of PR agency experience. Martin is mainly dealing with data aspects and is supplying the team with endless motivation and good vibes.



## Agweyu Robin

#### **Data Researcher**

Agweyu is a Landscape Architect by profession, managing aspects of our business development to make sure we can continue our research work. Agweyu's determination to get things done is an inspiration to all of us.

## Advisors

Every startup needs advice and support to thrive. We owe much of our growth to advisors who are kind enough to actively help us improve our research, technology, and consulting process.



### **Roderick Warren**

Roderick took an active part in building StartupBlink and is now involved in setting strategy for the company. Roderick is from Zurich, Switzerland, and has worked for various technology companies, such as Oracle and Sun Microsystems. Before entering the Tech industry, Roderick was a Specialist in Fire Protection and Emergency Management, working on assignments in conflict areas such as Iraq and Kosovo.



#### Gerardo Robledillo

Gerardo is a software engineer turned entrepreneur. He has lived as an expat in various corners of the world since 2005, and created both the <u>International Schools Database</u> and <u>Expatistan.com</u> to help make life easier for future expats. Every time we have a call with Gerardo, we end up launching something new.



## Pradeep Kakkattil

## Director, Office of Innovation, UNAIDS & CEO Health Innovation Exchange

Pradeep started his career as a journalist and filmmaker in India and joined the AIDS movement when a friend tested positive for HIV. Over the last three decades, he has been a health activist driving change and transformation at the community and institutional levels for access to healthcare. He currently heads the Office of Innovation at UNAIDS and co-founded the Health Innovation Exchange to leverage new technologies and investment, driving progress towards Sustainable Development Goals.



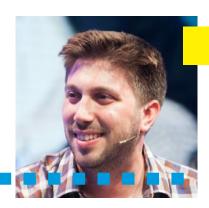
#### **Denise Gee**

Denise is a journalist, marketer, researcher, and strategic advisor with 20 years of experience in fintech and digital financial services and global corporate marketing – including BP, and as head of corporate communications for Visa. She is the co-founder of <u>Findexable</u>, which is StartupBlink's official Fintech Industry partner.



## **Eddy Vaisberg**

Eddy is an entrepreneur who is currently building and investing into companies in Kenya, Nigeria, Ukraine, and the US. He recently spent 4 years building Fuzu, a career development, and HR-tech startup in East Africa. During the past 5-months he's been shadowing and advising leading startups across the world including StartupBlink which played a key role in informing his overall geographic focus.



### **Daniel Seal**

Daniel is a serial entrepreneur & angel investor. He is the Founder & Executive Chairman of DeltaWorks, a new breed of venture building focused on emerging markets. He is a thought leader and advisor to governments on all aspects of startup ecosystem creation & innovation. In 2018, he sold Unbound to SingEx (a wholly-owned subsidiary of Temasek Holdings, Singapore). He was previously one of the youngest elected officials to the London Borough of Barnet representing Garden Suburb Ward. Daniel has a BSc (Hons.) in Biochemistry and an MSc in Business Management from the University of London.



## **Uri Adoni**

Uri is a General Partner at Sanara Capital, a health-tech focus fund investing in A & B round companies. He is also an angel investor, board member, speaker, and the author of the book "The Unstoppable Startup - Mastering Israel's Secret Rules of Chutzpah," published recently in the US by Harper Collins. Uri has over 20 years of experience in high-tech and over 13 years in venture capitalism. Prior to founding Sanara Capital, he was a partner at JVP (Jerusalem Venture Partners), one of Israel's leading venture capital firms with an impressive track record of IPOs on NASDAQ and M&A's to large leading multinationals. Prior to joining JVP, Uri was the CEO of Microsoft Networks (MSN) Israel.



#### **Nishant Das**

Nishant is an Industrial Designer with an MBA in Economic Development who transitioned to the humanitarian sector, working across North America, Asia, the Pacific, and Africa. He now manages the Response Innovation Lab in Somalia.



#### Adrien Henni

Adrien is a French entrepreneur who advises a variety of companies, funds, and institutions across Western and Eastern Europe. He also conducts research studies and speaks at conferences about tech developments in these areas.



## Simon Hardie

Simon has two decades of experience producing financial intelligence content and managing research and events for global media (including The Economist and Euromoney). He launched <u>findexable</u> to build the first global index of Fintech innovation, and is also the co-founder of the <u>Global Fintech Index</u>.



### **Lior Brownstein**

Lior is the founder of L.B Financial Services. A passionate student of life, Lior holds a Masters degree in business management and finance while working on his thesis dissertation. He utilizes his financial expertise to upgrade the accounting and financial management of Israeli and international businesses.



### Ran Sasson

Ran is a seasoned entrepreneurship ecosystems developer (rural areas expert), a district accelerators director, and leader of ClimateLaunchpad ISRAEL. He's an experienced digital transformation integrator and distributed systems architect.



### **Barak Dimenstein**

Barak is a marketing executive with more than 17 years experience, working for companies looking to scale and grow. Experienced in implementing a wide range of digital marketing strategies, campaign management, performance marketing, lead generation, data and analytics to help brands with their growth journey. Barak gained a demonstrated history of working in the digital marketing and advertising industry, discovering, initiating, and building operations from A to Z, managing departments, work teams, and business relationships. Barak brings extensive expertise in strategy orientated around building the full funnel between marketing and sales.



#### Jiah Kim

Jiah is the principal attorney for <u>Jiah Kim & Associates</u> and a legal advisor for StartupBlink. Jiah worked for several New York law firms before hanging her own shingle to serve her favorite clients: international startups. She continues to travel, learning about different laws, eating lots of great food, and meeting awesome people.



### Joel Almeida

Joel is a pathfinder and an active member of the Cape Verdean startup ecosystem. Joel co-founded Kriol MindSet, an organization that aims to promote ideas, experiences, initiatives, and technological solutions "made in CV" in the national and international circuit, with the primary purpose of contributing to the development of the Cape Verde innovation ecosystem.



### Milton Cabral

Milton is a digital transformation enthusiast, a UI/UX researcher, and SIDS startup ecosystem builder, connecting startups to corporations. With more than a decade in the GovTech industry, Milton has his fingerprints on several country-level projects for online citizen's services delivery and public administration modernization in Cape Verde. For the past 4 years, he has played an active role in the Startup Innovation Ecosystem as well in the Digital Economy and Telecommunication sector, leading and advising government initiatives to activate local innovation ecosystems through diverse projects that create community, foster talent, and expand markets.



#### Dean Kuchel

Dean advises individuals and businesses on remote work and the digital nomad movement, and helps governments adopt and adapt to the future of work. Founder of a 30,000 member community, Digital Nomads Israel, and a motivational speaker, Dean is a true global citizen, with unique professional experience in government, tech, and media jobs mixed with nine years of remote work across more than 100 countries.



#### Dan Valdhorn

Dan Valdhorn is the Founder and CEO of <u>TankU</u>, a startup that uses existing information from a range of sensors on the roads, together with AI, in order to make road-based services faster, safer, and more convenient.



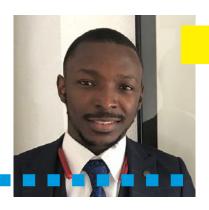
## **Andrew Berkowitz**

Andrew is a managing partner of the Global Startup Ecosystem movement and the CEO of SocialStack. His leading startup ecosystem podcast is one of the world's leading knowledge sources on this topic.

## Contributors •

Since the beginning of 2020, StartupBlink has been working with a talented group of data contributors from around the world who are passionate about startup ecosystem research. We cannot thank them enough for their contributions.

If you are interested in joining our team, apply here.



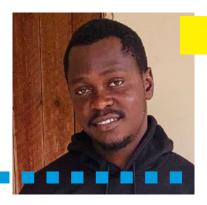
## Peter Gbologe

A financial and digital inclusion enthusiast with an interest in global economy development.



### Laone Tsheole

A data science enthusiast and researcher at heart, she is both analytical and creative.



## Olamidayo Mimiola

A Data Scientist at Robotics and Artificial Intelligence Nigeria who loves to transform Data insights into actionable intel, and is also passionate about how Artificial Intelligence can be used to transform the community. He holds a Bachelor's degree in Physics with Electronics from Redeemer's University Nigeria.



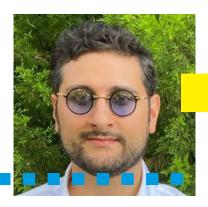
### **Nasib Jafarov**

A Ph.D. student at the Hungarian University of Agriculture and Life Sciences with professional experience as a teaching assistant at Baku Engineering University and 1.5 years of experience at Morgan Stanley, a well-known American-based investment firm.



## Giorgi Ziozde

Holds A BBA in Finance from Caucasus University, and is Co-Founder at Recrew.



## **Emre Korkmaz**

A startup ecosystem enthusiast who is passionate about working with game-changing startups and helping them shape a better future.



### Hezron M. Osano

PhD, ACIB, EDP (IEDC)

Institutional and Entrepreneurship Development Professional.

## Work with Us ------

Startups are engines of economic growth, creating high-quality jobs, substantial tax revenue, and retaining the most ambitious talent in our cities. The mission of StartupBlink is to uncover and share the momentum of startup ecosystems is fulfilled with this index.

The next step is to help grow those startup economies. StartupBlink works with dozens of startup ecosystem development organizations to help take their startup ecosystems to the next level.

## Startup Ecosystem Analysis



Analyze your startup ecosystem and understand its strengths and weaknesses. Compare your startup ecosystem to other cities/regions to learn how to attract investment and talent.

## **Startup Ecosystem Promotion**



A non-branded startup ecosystem resembles a product with no marketing. Put your startup ecosystem in front of hundreds of thousands of decision-makers with a variety of promotional activities and bespoke globally distributed ecosystem reports.

## Startup Ecosystem Portal and Mapping



One interactive and customized portal for your ecosystem to make sure everyone can visualize the potential and most recent activity of your startup ecosystem (view an example)

### **Capacity Building**



Connect and train your startup ecosystem developers and entrepreneurs with expert workshops, training, and events.

For more information about the above-mentioned modules, and for help with your specific ecosystem development projects, visit <u>this page</u>.

## Parting Words



We are proud to create this massive and open index and share it with hundreds of thousands of decision-makers.

If we have made a difference by even guiding one startup or investor to the right ecosystem, our mission is complete.

We always welcome feedback from our readers, feel free to share it with us.

Good luck with building whatever you are working on.





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Rank	City	Country	YoY	Total	Rank	City	Country	YoY	Total
Kalik	City	Country	Change	Score	Kalik	City	Country	Change	Score
101	Brisbane	Australia	+11	7.151	151	Rhine-Neckar Area	Germany	-8	5.104
102	Chennai	India	+31	7.148	152	Omaha	United States	-22	5.059
103	Orlando	United States	+4	7.011	153	The Hague	The Netherlands	+32	5.053
104	Calgary	Canada	+12	6.997	154	Toulouse	France	-31	5.026
105	Lexington	United States	+65	6.970	155	Lyon	France	-23	4.974
106	Warsaw	Poland	-28	6.832	156	Nanjing	China	+8	4.947
107	Basel	Switzerland	-14	6.775	157	Johannesburg	South Africa	+48	4.938
108	Bucharest	Romania	+3	6.765	158	Valencia	Spain	-6	4.935
109	Lausanne	Switzerland	-13	6.703	159	Cairo	Egypt	-13	4.911
110	Jacksonville	United States	+67	6.642	160	Marseille	France	+20	4.900
111	Ho Chi Minh City	Vietnam	+68	6.484	161	Greenville	United States	+2	4.828
112	Auckland	New Zealand	-7	6.443	162	Nairobi	Kenya	+150	4.823
113	Santa Cruz	United States	-4	6.422	163	Sheffield	United Kingdom	-27	4.820
114	Wuhan	China	+60	6.342	164	Gothenburg	Sweden	+139	4.815
115	Cincinnati	United States	-24	6.308	165	Perth	Australia	+6	4.812
116	St. Louis	United States	+23	6.304	166	Budapest	Hungary	+9	4.810
117	Madison	United States	-23	6.143	167	Stuttgart	Germany	-33	4.809
118	Malmö	Sweden	+19	6.105	168	Birmingham-Hoover	United States	-60	4.780
119	Osaka	Japan	+9	6.098	169	Virginia Beach	United States	+42	4.730
120	Boise	United States	+77	5.806	170	Abu Dhabi	UAE	+91	4.726
121	Zug	Switzerland	+45	5.790	171	Charleston	United States	-2	4.716
122	Indianapolis	United States	-5	5.770	172	Providence	United States	+31	4.712
123	Sofia	Bulgaria	-2	5.654	173	Rochester	United States	+50	4.693
124	Columbia	United States	-21	5.606	174	Luxembourg City	Luxembourg	+52	4.665
125	San Antonio	United States	-15	5.602	175	Eindhoven	The Netherlands	+11	4.617
126	Leeds	United Kingdom	+86	5.588	176	Brighton	United Kingdom	-19	4.609
127	Changsha	China	+89	5.581	177	Lima	Peru	+13	4.606
128	New Haven	United States	+54	5.566	178	Utrecht	The Netherlands	-40	4.563
129	New Orleans	United States	-16	5.545	179	Rio de Janeiro	Brazil	-48	4.559
130	Birmingham	United Kingdom	-16	5.537	180	Chongqing	China	-32	4.521
131	Cleveland	United States	+16	5.531	181	Kyoto	Japan	+55	4.514
132	Athens	Greece	+21	5.530	182	Kingston	Canada	-58	4.511
133	Richmond	United States	+56	5.478	183	Victoria	Canada	-42	4.495
134	Buffalo	United States	+8	5.418	184	Rotterdam	The Netherlands	+9	4.490
135	Cologne	Germany	-8	5.386	185	Krakow	Poland	-13	4.468
136	Porto	Portugal	-16	5.384	186	Wrocław Xiamen	Poland	-36	4.461
137	Albuquerque	United States	-8	5.373	187		China	-19	4.452
138 139	Geneva	Switzerland	-20 +10	5.329 5.325	188 189	Glasgow	United Kingdom	-37	4.443 4.416
140	Monterrey	Mexico Canada	• • • • • • • • • • • • • • • • • • • •	5.306	190	Ljubljana Kaunas	Slovenia Lithuania	-2	4.375
141	Edmonton Curitiba	Brazil	-14	5.243	191	Winnipeg	Canada	-6 -56	4.343
142	Quebec City	Canada	+3 -17	5.239	191	Sankt Gallen	Switzerland	-36 +70	4.335
143		. <del>.</del>	-3	5.237	193		Croatia	+11	4.332
144	Rome Haifa	ltaly Israel	-3 -25	5.237	193	Zagreb Oulu	Finland	-16	4.332
144		United Kingdom	• • • • • • • • • • • • • • • • • • • •	5.219	194	Hsinchu	Taiwan	+137	4.329
146	Reading Frankfurt	Germany	+63 -49	5.202	195	Riga	Latvia	+137	4.312
147	Cape Town	South Africa	-49 -2	5.202	197	Stavanger	Norway	+69 -42	4.309
147	Newcastle upon Tyne	United Kingdom	-2 +59	5.166	197	Mainz	Germany	+178	4.247
149	Ghent	Belgium	+39	5.160	199	Belgrade	Serbia	-18	4.247
150	Milwaukee	United States	+23		200	Belgrade	Serbia	-10 -41	4.213
130	wiiiwaukee	officed States	TZ3	5.132	200	Delglade	Servia	-41	4.113

Rank	City	Country	YoY Change	Total Score	Rank	City	Country	YoY Change	Total Score
201	Qingdao	China	+89	4.112	251	Graz	Austria	-49	2.929
202	Guadalajara	Mexico	-46	4.098	252	Grenoble	France	-5	2.922
203	Syracuse	United States	+113	3.999	253	Huntsville	United States	+489	2.920
204	Dortmund	Germany	+182	3.991	254	Riyadh	Saudi Arabia	-62	2.916
205	Medellin	Colombia	-22	3.989	255	Antwerp	Belgium	-18	2.902
206	Uppsala	Sweden	+210	3.981	256	Santa Rosa	United States	+129	2.853
207	Busan	South Korea	-45	3.906	257	Little Rock	United States	-6	2.829
208	Hartford	United States	+1	3.880	258	Montpellier	France	+8	2.789
209	Reykjavik	Iceland	+12	3.871	259	TianJin	China	-7	2.789
210	Chatham	United States	+294	3.865	260	Tucson	United States	-21	2.725
211	Nantes	France	+21	3.857	261	Chaoyang	China	+43	2.716
212	Jaipur	India	-17	3.856	262	Bellingham	United States	+542	2.711
213	Aarhus	Denmark	+15	3.819	263	Memphis	United States	+14	2.706
214	Dusseldorf	Germany	-20	3.814	264	Fort Myers	United States	-4	2.692
215	Belo Horizonte	Brazil	-61	3.789	265	Cardiff	United Kingdom	-9	2.673
216	Zhuhai	China	+56	3.775	266	Colorado Springs	United States	-47	2.653
217	Lille	France	+16	3.709	267	Kolkata	India	-53	2.633
218	Montevideo	Uruguay	-53	3.696	268	Wellington	New Zealand	+15	2.572
219	Bordeaux	France	-4	3.691	269	Bratislava	Slovakia	-73	2.564
220	Fukuoka	Japan	+20	3.684	270	Bilbao	Spain	-53	2.558
221	Maastricht	The Netherlands	+129	3.682	271	Nijmegen	The Netherlands	+162	2.538
222	Hanoi	Vietnam	-31	3.675	272	Nice	France	-28	2.490
223	Ahmedabad	India	-47	3.647	273	Turin	Italy	-42	2.479
224	Leipzig	Germany	-57	3.623	274	Bath	United Kingdom	+36	2.478
225	Belfast	United Kingdom	-25	3.604	275	Sarasota	United States	-21	2.477
226	Nottingham	United Kingdom	+27	3.541	276	Bentonville	United States	+268	2.438
227	Munster	Germany	+109	3.481	277	Lafayette	United States	-64	2.438
228	Christchurch	New Zealand	+168	3.478	278	Concord	United States	+169	2.421
229	Reno	United States	+38	3.472	279	Nagoya	Japan	-33	2.403
230 231	Princeton  Crand Banida	United States	-24 +11	3.471 3.354	280 281	Ankara Fuzhou	Turkey China	-70 +202	2.394 2.391
231	Grand Rapids Bonn	United States Germany	-71	3.344	282	Springfield	United States	+33	2.365
232	Halifax	Canada	+1	3.340	283	Dresden	Germany	-10	2.357
234	Edison	United States	+209	3.333	284	Carson City	United States	+198	2.349
235	Chattanooga	United States	-13	3.330	285	Yangzhou	China	new	2.323
236	Puebla	Mexico	+193	3.312	286	Bloomington	United States	+14	2.304
237	Saint Petersburg	Russia	-38	3.272	287	Albany	United States	-39	2.291
238	Liverpool	United Kingdom	+33	3.255	288	Brno	Czechia	-53	2.263
239	Adelaide	Australia	-41	3.248	289	Lincoln	United States	+2	2.256
240	Porto Alegre	Brazil	-52	3.196	290	Lund	Sweden	+28	2.229
241	Karlsruhe	Germany		3.121	291	Karachi	Pakistan	-5	2.220
242	Oklahoma City	United States	-15	3.120	292	Rennes	France	-49	2.219
243	Sunshine Coast	Australia	+6	3.118	293	Cali	Colombia	+5	2.214
244	Yerevan	Armenia	+38	3.071	294	Honolulu	United States	-35	2.212
245	Fort Collins	United States	-27	3.052	295	Stevenage	United Kingdom	+49	2.212
246	Charlottesville	United States	+112	3.029	296	Accra	Ghana	-15	2.209
247	Saint John's	Canada	new	3.004	297	Cork	Ireland	+17	2.154
248	Cordoba	Argentina	+49	2.998	298	Galway	Ireland	+21	2.067
249	Chemnitz	Germany	+80	2.962	299	San José	Costa Rica	+34	2.043
250	Amman	Jordan	-49	2.958	300	Turku	Finland	+80	2.041

Rank	City	Country	YoY Change	Total Score	Rank	City	Country	YoY Change	Total Score
301	Poznan	Poland	-81	2.031	351	Malaga	Spain	-58	1.519
302	Greenwich	United States	new	2.028	352	Dayton	United States	-9	1.504
303	Tubingen	Germany	new	2.022	353	Asheville	United States	-29	1.503
304	Bern	Switzerland	-80	2.017	354	Valletta	Malta	+18	1.496
305	Lahore	Pakistan	-48	2.002	355	Canberra	Australia	-86	1.495
306	Des Moines	United States	-32	1.999	356	Gibraltar	Gibraltar	+487	1.484
307	Wichita	United States	+28	1.977	357	Colombo	Sri Lanka	+17	1.474
308	Yokneam	Israel	-24	1.971	358	Lugano	Switzerland	+67	1.472
309	Hamilton	Canada	+13	1.969	359	Warwick	United Kingdom	new	1.466
310	Fresno	United States	-81	1.955	360	Las Palmas de Gran Canaria	Spain	-135	1.462
311	Beer Sheva	Israel	-73	1.900	361	Chester	United Kingdom	+190	1.456
312	Minsk	Belarus	-82	1.868	362	Kochi	India	-98	1.447
313	Nassau	The Bahamas	new	1.852	363	Winston-Salem	United States	+10	1.431
314	Guildford	United Kingdom	+16	1.835	364	Chandigarh	India	-75	1.421
315	Worcester	United States	-7	1.827	365	Davis	United States	+67	1.420
316	The Woodlands	United States	+412	1.822	366	Tartu	Estonia	-91	1.416
317	Tulsa	United States	+43	1.821	367	Gold Coast	Australia	-91	1.414
318	Ningbo	China	+60	1.774	368	Jinan	China	+117	1.401
319	Marietta	United States	+44	1.771	369	Fayetteville	United States	-56	1.400
320	Linz	Austria	-13	1.769	370	Exeter	United Kingdom	+152	1.398
321	Florence	Italy	-63	1.748	371	Spokane	United States	-48	1.386
322	Florianopolis	Brazil	-52	1.742	372	Santa Cruz de Tenerife	Spain	-127	1.383
323	Portsmouth	United Kingdom	+294	1.741	373	Trondheim	Norway	-6	1.381
324	Seville	Spain	-25	1.724	374	Santa Fe	United States	+9	1.378
325	Casablanca	Morocco	+39	1.686	375	Brentwood	United States	+204	1.378
326	Dhaka	Bangladesh	-63	1.681	376	Strasbourg	France	-15	1.370
327	Leuven	Belgium	-16	1.678	377	Saskatoon	Canada	+33	1.354
328	Tampere	Finland	-2	1.674	378	Bozeman	United States	+131	1.349
329	Manama	Bahrain	+8	1.673	379	Limassol	Cyprus	+56	1.331
330	Cluj-Napoca	Romania	-80	1.662	380	Gainesville	United States	-5	1.329
331	Nuremberg	Germany	-44	1.652	381	Savannah	United States	-10	1.315
332	Bergen	Norway	+119	1.651	382	Tbilisi	Georgia	+25	1.314
333	San Juan	Puerto Rico	+14	1.651	383	Knoxville	United States	-82	1.312
334	Bologna	ltaly 	-42	1.633	384	Charleroi	Belgium	new	1.302
335	Akron	United States	+117	1.630	385	Jeddah	Saudi Arabia	-91	1.281
336	Wuxi	China	+217	1.622	386	Odense	Denmark	-32	1.278
337	Corvallis	United States	-16	1.606	387	Anchorage -	United States	-62	1.270
338	Faridabad -	India	+118	1.605	388	Bournemouth	United Kingdom	-54	1.266
339	Eugene	United States	+97	1.601	389	Norwich	United Kingdom	-69	1.264
340	Caesarea-Or Akiva	Israel	new	1.590	390	Frederick	United States	+32	1.260
341	George Town	Malaysia	+8	1.581	391	Xi'An	China	new	1.260
342	Fredericton	Canada	+4	1.570	392	Gdańsk	Poland	-114	1.257
343	Nur-Sultan	Kazakhstan	+14	1.567	393	Coimbatore	India	-105	1.242
344	Medford	United States	+38	1.567	394	Sendai	Japan	new	1.242
345	Enschede	The Netherlands	+59	1.559	395	Kigali	Rwanda	-130	1.235
346	Franklin	United States	-29	1.557	396	Greensboro	United States	+54	1.218
347	Darmstadt	Germany	-52	1.540	397	George Town	Cayman Islands	new	1.217
348	Southampton	United Kingdom	-42 -200	1.535	398	Hanover	Germany	-39	1.211
349 350	Middletown	United States United States	+200	1.535	399	Limerick	Ireland	+132	1.205
330	Lewes	Officed States	-8	1.533	400	Aachen	Germany	-60	1.199

Rank	City	Country	YoY Change	Total Score	Rank	City	Country	YoY Change	Total Score
401	Lucerne	Switzerland	-35	1.196	451	Girona	Spain	+164	0.908
402	Nicosia	Cyprus	+12	1.191	452	Regina	Canada	+18	0.903
403	Changzhou	China	+361	1.187	453	Slough	United Kingdom	+265	0.898
404	Coventry	United Kingdom	+19	1.183	454	Oviedo	Spain	+261	0.887
405	Bandung	Indonesia	-37	1.165	455	Cheyenne	United States	-25	0.882
406	Liege	Belgium	-16	1.159	456	Novi Sad	Serbia	-111	0.881
407	San Luis Obispo	United States	-9	1.159	457	Traverse City	United States	-8	0.877
408	Petaluma	United States	+69	1.158	458	Surat	India	-96	0.874
409	lzmir	Turkey	-25	1.154	459	Skopje	North Macedonia	-179	0.871
410	Ithaca	United States	-40	1.153	460	Quito	Ecuador	-61	0.871
411	Hefei	China	+135	1.151	461	Tirana	Albania	+27	0.860
412	Warrington	United Kingdom	new	1.148	462	Kampala	Uganda	-93	0.855
413	Kelowna	Canada	-86	1.130	463	Baton Rouge	United States	+33	0.852
414	Donostia-San Sebastian	Spain	+193	1.120	464	Beirut	Lebanon	-112	0.849
415	Essen	Germany	-77	1.113	465	Cheltenham	United Kingdom	+85	0.827
416	Bakersfield	United States	-85	1.109	466	Palma de Mallorca	Spain	+64	0.825
417	Tunis	Tunisia	-76	1.107	467	Janesville	United States	+307	0.825
418	Douglas	Isle of Man	+574	1.106	468	Recife	Brazil	-7	0.824
419	Bethlehem	United States	+79	1.105	469	Groningen	The Netherlands	-74	0.815
420	Saint Helier	Jersey	-55	1.105	470	Zhengzhou	China	-119	0.813
421	Daejeon	South Korea	+136	1.099	471	Milton Keynes	United Kingdom	+7	0.811
422	Panama City	Panama	+47	1.098	472	Ulaanbaatar	Mongolia	+19	0.810
423	Indore	India	-144	1.087	473	Abuja	Nigeria	-7	0.807
424	Zaragoza	Spain	+7	1.072	474	Murray	United States	new	0.807
425	Harrisburg	United States	+15	1.069	475	Harrisonburg	United States	-63	0.805
426	Barranquilla	Colombia	+410	1.067	476	Portsmouth	United States	-55	0.804
427	Preston	United Kingdom	+172	1.063	477	South Bend	United States	-1	0.796
428	Jackson	United States	-40	1.062	478	Venice	Italy	-91	0.793
429	Jiaxing	China	-12	1.053	479	Roswell	United States	+7	0.788
430	Pamplona	Spain	+378	1.031	480	Katowice	Poland	-124	0.786
431	Vadodara	India	-18	1.020	481	Neuchatel	Switzerland	+92	0.783
432	Braga	Portugal	-136	1.017	482	Derby	United Kingdom	+43	0.782
433	Gdynia	Poland	-78	1.004	483	Vaduz	Liechtenstein	-23	0.782
434	Fort Wayne	United States	+283	1.000	484	San Rafael	United States	-36	0.782
435	Mobile	United States	+204	0.993	485	Murcia	Spain	+63	0.782
436	Iowa City	United States	-18	0.992	486	Chian	China	-11	0.777
437	Champaign	United States	+92	0.983	487	Livermore	United States	-76	0.770
438	Islamabad 	Pakistan	-1	0.981	488	Reading	United States	+231	0.768
439	Peterborough	United Kingdom	+84	0.960	489	Addis Ababa	Ethiopia	+6	0.764
440	Taoyuan City	Taiwan	+70	0.959	490	Canton	United States	+170	0.763
441	Coimbra	Portugal	+56	0.958	491	Salzburg	Austria	-83	0.762
442	Freiburg	Germany	-41	0.957	492	Idaho Falls	United States	+200	0.760
443	Baku	Azerbaijan	+12	0.954	493	Hamilton	Bermuda	+509	0.755
444	Fargo	United States	+145	0.953	494	Dakar	Senegal	+333	0.753
445	London	Canada	+58	0.947	495	Charlottetown	Canada	+134	0.753
446	Northampton	United Kingdom	+99	0.946	496	Leicester	United Kingdom	+4	0.749
447	Baoshan	China	+266	0.945	497	A Coruna	Spain	+215	0.749
448	Auburn	United States	+386	0.927	498	Kalamazoo	United States	+176	0.746
449	Cebu City	Philippines	-181	0.915	499	Bremen	Germany	-65	0.745
450	Rijeka	Croatia	-12	0.909	500	Goa	India	+272	0.742

Rank	City	Country	YoY Change	Total Score	Rank	City	Country	YoY Change	Total Score
501	Lancaster	United States	-39	0.736	551	s-Hertogenbosch	The Netherlands	new	0.595
502	Ames	United States	+45	0.734	552	Zapopan	Mexico	-89	0.590
503	Brookline	United States	-22	0.725	553	Kortrijk	Belgium	new	0.587
504	Augsburg	Germany	-33	0.723	554	Sioux Falls	United States	-87	0.582
505	Linkoping	Sweden	_	0.721	555	Kazan	Russia	-127	0.582
506	State College	United States	+12	0.716	556	Jena	Germany	-23	0.580
507	Thessaloniki	Greece	-128	0.709	557	Aberdeen	United Kingdom	+3	0.579
508	Genoa	Italy	+3	0.709	558	Crawley	United Kingdom	new	0.578
509	New Brunswick	United States	-128	0.705	559	Port Louis	Mauritius	new	0.575
510	Missoula	United States	-108	0.704	560	Panama City	United States	+86	0.571
511	Modiin-Maccabim-Reut	Israel	+116	0.702	561	Foshan	China	+50	0.567
512	Nashua	United States	-97	0.697	562	Parsippany-Troy Hills	United States	+226	0.566
513	Manassas	United States	+72	0.695	563	Dammam	Saudi Arabia	new	0.566
514	Nazareth	Israel	-6	0.691	564	Herning	Denmark	+317	0.563
515	Basingstoke	United Kingdom	+115	0.691	565	Newport News	United States	+16	0.561
516	Aalborg	Denmark	-10	0.685	566	Zhenjiang	China	new	0.556
517	Blacksburg	United States	+39	0.684	567	Chiang Mai	Thailand	-170	0.555
518	York	United Kingdom	+104	0.677	568	Worcester	United Kingdom	+280	0.554
519	Cagliari	Italy	-20	0.673	569	Joinville	Brazil	-143	0.553
520	Brasilia	Brazil	-181	0.666	570	Dundee	United Kingdom	+226	0.549
521	Alicante	Spain	+129	0.665	571	Sapporo	Japan	+197	0.549
522	Patna	India	+218	0.662	572	Kiel	Germany	+106	0.546
523	Ashdod	Israel	-64	0.659	573	Esch an der Alzette	Luxembourg	-84	0.545
524	Doncaster	United Kingdom	new	0.658	574	Ostrava	Czechia	-109	0.545
525	Naples	Italy	-79	0.656	575	Chico	United States	+84	0.540
526	Lawrence	United States	+201	0.654	576	Yantai	China	-1	0.539
527	Potsdam	Germany	-33	0.653	577	Durban	South Africa	-9	0.538
528	Dalian	China	-101	0.652	578	Dunedin	New Zealand	new	0.536
529	Kathmandu	Nepal	-72	0.640	579	Brescia	Italy	+72	0.535
530	Lansing	United States	-58	0.636	580	Padua	Italy	+182	0.534
531	Doha	Qatar	-63	0.636	581	Verona	Italy	-40	0.534
532	College Station	United States	+2	0.635	582	Sunderland	United Kingdom	+289	0.534
533	Sherbrooke	Canada	+5	0.635	583	Dar es Salaam	Tanzania	+141	0.532
534	Thiruvananthapuram	India	-128	0.632	584	Saarbrucken	Germany	-65	0.531
535	Catania	Italy	-132	0.631	585	Yavne	Israel	new	0.530
536	Guelph	Canada	new	0.629	586	Tainan City	Taiwan	+163	0.528
537	Novato	United States	+40	0.629	587	Farnborough	United Kingdom	+278	0.526
538	Castellon de la Plana	Spain -	+242	0.627	588	Córdoba	Spain	new	0.526
539	Cannes	France	new	0.625	589	Novosibirsk	Russia	-189	0.522
540	Duluth	United States	-16	0.620	590	Mechelen	Belgium	+257	0.518
541	Trento	Italy	-83	0.618	591	Midland	United States	-182	0.514
542	Timisoara	Romania	-151	0.617	592	Napa	United States	-1	0.512
543	Newcastle	Australia	-79	0.616	593	Swansea	United Kingdom	+3	0.511
544	Monterey	United States	+58	0.615	594	Green Bay	United States	+10	0.511
545	Yangon	Myanmar	-53	0.614	595	Maidenhead	United Kingdom	+183	0.508
546	Manchester	United States	-153	0.607	596	Cancun	Mexico	+58	0.508
547	Phuket	Thailand	-105	0.607	597	Tallahassee	United States	-3	0.508
548	Toledo	United States	+155	0.600	598	Hasselt	Belgium	-55	0.507
549	Caen	France	new	0.597	599	Shelton	United States	+263	0.507
550	Cedar Rapids	United States	-49	0.595	600	Sao Jose dos Campos	Brazil	-83	0.504

Rank	City	Country	YoY	Total	Rank	City	Country	YoY	Total
	,		Change	Score		, i		Change	Score
601	Huntington	United States	-209	0.504	651	Harbin	China	+316	0.441
602	Conroe	United States	+262	0.504	652	Gijón	Spain	-38	0.438
603	Split	Croatia	-13	0.501	653	Lleida	Spain	new	0.436
604	Helsingborg	Sweden	-32	0.500	654	Chisinau	Moldova	-119	0.434
605	Saint Peter Port	Guernsey	+382	0.495	655	Chelmsford	United Kingdom	new	0.434
606	Praia	Cape Verde	+18	0.494	656	Lublin	Poland	-92	0.433
607	Tauranga	New Zealand	new	0.491	657	Sheridan	United States	-117	0.433
608	Shenyang	China	+241	0.490	658	Roanoke	United States	+143	0.430
609	Lebanon	United States	-70	0.490	659	Windsor	Canada	+12	0.430
610	Eilat	Israel	-136	0.489	660	Pretoria	South Africa	-170	0.426
611	Durango	United States	-97	0.489	661	Ibadan	Nigeria	-308	0.424
612	Swindon	United Kingdom	new	0.487	662	Santiago de Queretaro	Mexico	+149	0.424
613	Danville	United States	-77	0.482	663	Granada	Spain	-1	0.424
614	Taichung City	Taiwan	+256	0.481	664	Abidjan	Ivory Coast	-51	0.424
615	Gliwice	Poland	new	0.481	665	Lodz	Poland	-2	0.424
616	Debrecen	Hungary	-137	0.478	666	Duisburg	Germany	+222	0.423
617	Uberlandia	Brazil	-35	0.477	667	Aveiro	Portugal	-84	0.421
618	Chihuahua	Mexico	-86	0.477	668	Rouen	France	-223	0.420
619	Laguna Niguel	United States	-32	0.476	669	Lucknow	India	-215	0.419
620	Haikou	China	+121	0.476	670	Springdale	United States	new	0.419
621	Madurai	India	-56	0.476	671	Nagpur	India	-164	0.417
622	Hobart	Australia	-183	0.476	672	Ribeirao Preto	Brazil	-199	0.417
623	Breda	The Netherlands	-39	0.475	673	Vasteras	Sweden	-131	0.414
624	Moncton	Canada	-122	0.474	674	Leesburg	United States	-146	0.413
625	Magdeburg	Germany	+9	0.474	675	Hainan	China	new	0.411
626	Danbury	United States	-74	0.474	676	Pensacola	United States	-161	0.411
627	Peoria	United States	+109	0.473	677	Mendoza	Argentina	-161	0.410
628	Szczecin	Poland	-66	0.471	678	Athens	United States	+12	0.409
629	Caracas	Venezuela	-102	0.471	679	Amersfoort	The Netherlands	-26	0.409
630	Bergamo	Italy	+45	0.467	680	Augusta	United States	+125	0.408
631	Luanda	Angola	+321	0.467	681	Fortaleza	Brazil	-237	0.407
632	Regensburg	Germany	-58	0.467	682	Wollongong	Australia	-162	0.407
633	Almaty	Kazakhstan	-10	0.467	683	Reims	France	+63	0.405
634	Tehran	Iran	-122	0.466	684	Yverdon-les-Bains	Switzerland	-92	0.403
635	Campinas	Brazil	-258	0.466	685	Haarlem	The Netherlands	-53	0.402
636	Saint George	United States	new	0.461	686	Biel Bienne	Switzerland	+146	0.402
637	Loughborough	United Kingdom	+20	0.460	687	Pisa	Italy	-40	0.402
638	Fribourg	Switzerland	+152	0.460	688	Colchester	United Kingdom	new	0.401
639	North Andover	United States	new	0.458	689	La Rochelle	France	new	0.400
640	Erie	United States	-28	0.451	690	Visakhapatnam	India	-237	0.399
641	Flint	United States	+130	0.449	691	Truro	United Kingdom	-65	0.398
642	Middlesbrough	United Kingdom	+81	0.448	692	Kingston	United States	new	0.397
643	Ghaziabad	India	-202	0.448	693	Rosario	Argentina	+179	0.395
644	Varna	Bulgaria	-224	0.446	694	Tsukuba	Japan	+215	0.390
645	Kosice	Slovakia	-119	0.445	695	Raipur	India	+16	0.383
646	Evansville	United States	new	0.444	696	Lubbock	United States	+25	0.380
647	Belem	Brazil	+283	0.443	697	Phnom Penh	Cambodia	-77	0.378
648	Annecy	France	-111	0.442	698	Arnhem	The Netherlands	-139	0.377
649	Modena	Italy	+16	0.441	699	Bielefeld	Germany	-129	0.377
650	Valladolid	Spain	new	0.441	700	Windhoek	Namibia	+156	0.377
	vanadonu	Spani	LICAA	V.77 I	700	VVIIIUIIUEK	Ivannola	-130	0.374

Rank	City	Country	YoY Change	Total Score	Rank	City	Country	YoY Change	Total Score
701	Changchun	China	+141	0.373	751	Santo Domingo	Dominican Republic	-171	0.317
702	Allentown	United States	-58	0.373	752	Binghamton	United States	+62	0.315
703	Andover	United Kingdom	-65	0.371	753	Bedford	United Kingdom	+120	0.314
704	Reus	Spain	new	0.368	754	Manresa	Spain	new	0.313
705	Aspen	United States	new	0.368	755	Dordrecht	The Netherlands	+76	0.313
706	Saint Catharines	Canada	new	0.368	756	Sion	Switzerland	new	0.313
707	Watsonville	United States	new	0.366	757	Granollers	Spain	new	0.311
708	Cagayan de Oro	Philippines	-215	0.364	758	Oradea	Romania	new	0.310
709	Surabaya	Indonesia	+50	0.363	759	Stratford-upon-Avon	United Kingdom	new	0.308
710	Elche	Spain	new	0.361	760	Myrtle Beach	United States	-157	0.308
711	Murrieta	United States	-125	0.359	761	Vijayawada	India	-195	0.308
712	Alkmaar	The Netherlands	new	0.359	762	Fredericksburg	United States	new	0.308
713	Goiania	Brazil	-97	0.356	763	Szeged	Hungary	-108	0.307
714	Astoria	United States	-95	0.355	764	Mogadishu	Somalia	-197	0.302
715	lași	Romania	-231	0.355	765	Jodhpur	India	-101	0.302
716	Guiyang	China	new	0.354	766	Białystok	Poland	+124	0.302
717	Zwolle	The Netherlands	+52	0.353	767	San Luis Potosi	Mexico	-212	0.302
718	Salisbury	United Kingdom	new	0.353	768	Joensuu	Finland	-52	0.300
719	Boras	Sweden	new	0.352	769	Tyler	United States	-174	0.300
720	Maribor	Slovenia	-315	0.351	770	Shreveport	United States	-16	0.300
721	Agadir	Morocco	-167	0.349	771	Algiers	Algeria	+213	0.299
722	Newport	United Kingdom	-66	0.347	772	Kaliningrad	Russia	-162	0.298
723	Redding	United States	-62	0.344	773	Aalst	Belgium	-72	0.296
724	Palermo	ltaly	-96	0.340	774	Vitoria	Spain	-48	0.296
725	Innsbruck	Austria	-120	0.339	775	Peterborough	Canada	+121	0.296
726	Kaohsiung City	Taiwan	+178	0.339	776	Vitoria	Brazil	-128	0.295
727	Salvador	Brazil	-57	0.338	777	Sheboygan	United States	new	0.294
728	Maringá	Brazil	+180	0.337	778	Pontevedra	Spain	-160	0.293
729	Monroe	United States	+92	0.337	779	Bhopal	India	-170	0.293
730	Umea	Sweden	new	0.336	780	Grand Forks	United States	-20	0.291
731	Thunder Bay	Canada	-133	0.336	781	Nyon	Switzerland	new	0.290
732	Bishkek	Kyrgyzstan	new	0.333	782	Örebro	Sweden	new	0.290
733	Andorra la Vella	Andorra	+69	0.333	783	Darwin	Australia	-39	0.287
734	Lusaka	Zambia	+143	0.332	784	Logrono	Spain	+116	0.286
735	Byron Bay	Australia	new	0.330	785	Maidstone	United Kingdom	new	0.286
736	Kuwait City	Kuwait	-256	0.327	786	Biarritz	France	+24	0.286
737	Youngstown	United States	new	0.327	787	Jonkoping	Sweden	-111	0.283
738	Halden	Norway	new	0.327	788	Grand Junction	United States	-210	0.282
739	Lancaster	United Kingdom	new	0.327	789	Blumenau	Brazil	+100	0.281
740	Tarragona	Spain	+114	0.325	790	Warren	United States	new	0.281
741	Vigo	Spain	new	0.325	791	Kristiansand	Norway	new	0.279
742	Odessa	Ukraine	-348	0.325	792	Wiener Neustadt	Austria	new	0.278
743	Jyvaskyla	Finland	-71	0.325	793	Rostock	Germany	-11	0.277
744	Texas City	United States	+63	0.322	794	Incheon	South Korea	+46	0.276
745	Bhubaneswar	India	-79	0.322	795	Huddersfield	United Kingdom	+80	0.275
746	Tashkent	Uzbekistan	+136	0.321	796	Parma	Italy	+88	0.275
747	Ancona	Italy	-10	0.321	797	Konstanz	Germany	+40	0.271
748	Whitefish	United States	new	0.321	798	Halmstad	Sweden	-28	0.271
749	Lviv	Ukraine	-494	0.320	799	Hilversum	The Netherlands	-103	0.270
750	Lakeland	United States	-189	0.319	800	Harrogate	United Kingdom	new	0.269

Rank	City	Country	YoY Change	Total Score	Rank	City	Country	YoY Change	Total Score
801	Santiago de Compostela	Spain	-10	0.269	851	Londrina	Brazil	+27	0.230
802	Hooksett	United States	+74	0.269	852	Collingwood	Canada	new	0.230
803	Kalmar	Sweden	new	0.268	853	Brasov	Romania	-147	0.230
804	Udaipur	India	-203	0.267	854	Tomsk	Russia	-177	0.230
805	Skellefteå	Sweden	new	0.266	855	Kharkiv	Ukraine	-342	0.230
806	Pescara	Italy	-96	0.265	856	Naha	Japan	new	0.229
807	Cornwall	Canada	new	0.265	857	Saint John	Canada	-205	0.227
808	Wurzburg	Germany	-220	0.265	858	Geelong	Australia	new	0.227
809	Windsor	United Kingdom	+21	0.264	859	Rzeszow	Poland	-9	0.226
810	Steinkjer	Norway	new	0.263	860	Joplin	United States	-158	0.226
811	Meridian	United States	new	0.262	861	Ulyanovsk	Russia	-52	0.226
812	Rajkot	India	-187	0.261	862	Chur	Switzerland	new	0.224
813	Scranton	United States	-172	0.260	863	Toulon	France	new	0.224
814	Modesto	United States	-89	0.258	864	Pattaya City	Thailand	-31	0.224
815	Metz	France	-180	0.258	865	Brantford	Canada	-229	0.223
816	Klagenfurt am Wörthersee	Austria	-116	0.257	866	Dundalk	Ireland	+49	0.222
817	Antalya	Turkey	-168	0.257	867	Sandpoint	United States	new	0.221
818	Hamilton	New Zealand	new	0.255	868	Compiegne	France	new	0.220
819	Kanpur	India	-213	0.255	869	Udine	Italy	-186	0.220
820	Barrie	Canada	-262	0.253	870	Temecula	United States	-197	0.219
821	Greater Sudbury	Canada	new	0.253	871	Yekaterinburg	Russia	-191	0.216
822	Wiesbaden	Germany	-191	0.251	872	Chambéry	France	new	0.215
823	Palmerston North	New Zealand	new	0.251	873	Nelson	New Zealand	new	0.214
824	Victoria	Seychelles	+99	0.251	874	Hermosillo	Mexico	-192	0.214
825	Fredrikstad	Norway	new	0.251	875	Letchworth Garden City	United Kingdom	new	0.213
826	Middlebury	United States	new	0.250	876	Starkville	United States	new	0.212
827	Haugesund	Norway	new	0.249	877	Venlo	The Netherlands	new	0.211
828	Treviso	Italy	-259	0.248	878	Syracuse	Italy	-21	0.211
829	Appleton	United States	-143	0.246	879	Mansfield	United States	new	0.211
830	Heerlen	The Netherlands	+22	0.246	880	Angers	France	new	0.209
831	Stockton	United States	-127	0.245	881	Ulm	Germany	new	0.209
832	Guatemala City	Guatemala	-211	0.245	882	El Paso	United States	-162	0.208
833	Brest	France	-50	0.245	883	Ede	The Netherlands	-152	0.207
834	Gloucester	United Kingdom	new	0.245	884	Orléans	France	new	0.207
835	Schenectady	United States	-193	0.244	885	Hereford	United Kingdom	new	0.206
836	Marbella	Spain	-128	0.244	886	Varanasi	India	-136	0.206
837	Ipswich	United Kingdom	new	0.244	887	Trieste	Italy	new	0.205
838	Saint Malo	France	-86	0.244	888	Didcot	United Kingdom	new	0.205
839	Chelyabinsk	Russia	-202	0.243	889	Bracknell	United Kingdom	new	0.205
840	Billings	United States	-73	0.243	890	Clarksville	United States	new	0.205
841	Ocala	United States	-147	0.242	891	Mombasa	Kenya	-135	0.205
842	Niš	Serbia	new	0.242	892	Tours	France	+9	0.204
843	Cadiz	Spain	new	0.241	893	Sao Leopoldo	Brazil	+5	0.202
844	Waimea	United States	new	0.239	894	Potsdam	United States	-119	0.202
845	Amherst	United States	-79	0.239	895	Sarajevo	Bosnia and Herzegovina	-262	0.201
846	Hiroshima	Japan	-149	0.238	896	Lappeenranta	Finland	new	0.201
847	Salamanca	Spain	new	0.236	897	Nanaimo	Canada	new	0.199
848	Paphos	Cyprus	-255	0.235	898	Sharjah	UAE	-176	0.199
849	Lulea	Sweden	new	0.231	899	Bowling Green	United States	-25	0.199
850	Telluride	United States	new	0.230	900	Lethbridge	Canada	new	0.198

Rank	City	Country	YoY Change	Total Score	Rank	City	Country	YoY Change	Total Score
901	Taiyuan	China	+67	0.198	951	Valparaiso	Chile	-208	0.178
902	Medan	Indonesia	-33	0.197	952	Naga	Philippines	new	0.177
903	Leon	Mexico	-88	0.197	953	Östersund	Sweden	new	0.177
904	Yogyakarta	Indonesia	-236	0.197	954	Norrkoping	Sweden	new	0.177
905	Montgomery	United States	-81	0.196	955	Kennewick	United States	new	0.177
906	Sundsvall	Sweden	new	0.196	956	Bradford	United Kingdom	-275	0.177
907	Newbury	United Kingdom	new	0.194	957	Donegal	Ireland	new	0.176
908	Kunming	China	-29	0.194	958	Bari	Italy	new	0.176
909	Emporia	United States	new	0.194	959	Davao City	Philippines	-173	0.175
910	Mantua	Italy	-15	0.194	960	Viña del Mar	Chile	-273	0.175
911	Okayama	Japan	new	0.194	961	Chiasso	Switzerland	new	0.174
912	Launceston	Australia	new	0.194	962	Portage	United States	new	0.174
913	Oldenburg	Germany	-85	0.193	963	Salinas	United States	-35	0.174
914	Spartanburg	United States	new	0.193	964	Klaipeda	Lithuania	-167	0.174
915	Perugia	Italy	-80	0.192	965	Leiria	Portugal	new	0.173
916	Reggio Emilia	Italy	+1	0.192	966	Nancy	France	new	0.173
917	Almelo	The Netherlands	new	0.192	967	Limoges	France	-56	0.172
918	Dehradun	India	-179	0.192	968	Vila Velha	Brazil	-13	0.171
919	Sault Ste. Marie	Canada	new	0.192	969	Siena	Italy	-222	0.171
920	Sant Just Desvern	Spain	new	0.191	970	Hilo	United States	new	0.171
921	Pecs	Hungary	-140	0.191	971	Owen Sound	Canada	new	0.171
922	Nanning	China	+9	0.191	972	Hova	Sweden	new	0.169
923	Quanzhou	China	-534	0.191	973	Houthalen-Helchteren	Belgium	new	0.169
924	Pristina	Kosovo	new	0.191	974	Biella	Italy	new	0.169
925	Kuopio	Finland	new	0.191	975	Nashik	India	-55	0.169
926	Warsaw	United States	new	0.190	976	Port Hope	Canada	new	0.168
927	Salo	Finland	new	0.190	977	Месса	Saudi Arabia	-282	0.168
928	Greenfield	United States	new	0.189	978	Bangor	United States	-127	0.167
929	Gavle	Sweden	new	0.188	979	Leeuwarden	The Netherlands	new	0.167
930	Trnava	Slovakia	new	0.188	980	Gwangju	South Korea	-225	0.167
931	Tralee	Ireland	new	0.187	981	Székesfehérvár	Hungary	-22	0.166
932	Juiz de Fora	Brazil	-137	0.187	982	Bolzano	Italy	-231	0.166
933	Las Cruces	United States	-195	0.187	983	Oxford	United States	-225	0.166
934	Guwahati	India	new	0.187	984	Nanchang	China	-45	0.166
935	Santander	Spain	-141	0.187	985	Asunción	Paraguay	new	0.165
936	Shrewsbury	United Kingdom	new	0.185	986	Grand Baie	Mauritius	new	0.165
937	Stratford	Canada	-139	0.185	987	Red Deer	Canada	new	0.165
938	Hawkesbury	Canada	new	0.184	988	Cosenza	Italy	new	0.164
939	Willemstad	Curaçao	new	0.184	989	Plzen	Czechia	-145	0.162
940	Plymouth	United Kingdom	new	0.184	990	Ashkelon	Israel	new	0.162
941	Erbil	Iraq	new	0.183	991	Rabat	Morocco	-138	0.162
942	Blackpool	United Kingdom	-129	0.182	992	Harpenden	United Kingdom	new	0.161
943	Ketchum	United States	new	0.182	993	Rapid City	United States	new	0.160
944	Salisbury	United States	new	0.181	994	Imola	Italy	new	0.159
945	Ernakulam	India	new	0.181	995	Almería	Spain	new	0.158
946	Telford	United Kingdom	new	0.181	996	Waterford	Ireland	-151	0.158
947	Shijiazhuang	China	-125	0.181	997	Bet Shemesh	Israel	new	0.157
948	Great Barrington	United States	new	0.179	998	Johor Bahru	Malaysia	-250	0.156
949	Funchal	Portugal	-242	0.179	999	Zielona Gora	Poland	-140	0.156
950	Wokingham	United Kingdom	-15	0.178	1000	Palm Desert	United States	-194	0.156