

*How to cite this paper:* Minasyan, A., Martirosyan, M. (2023). Analysis of Global Startup Market. *Messenger of ASUE, 3*(75), 119-136. DOI: 10.52174/1829-0280\_2023.3-119 *Received:* 09.11.2023. *Revision:* 14.11.2023. *Accepted:* 28.12.2023.

## ANNA MINASYAN

Associate Professor of the Chair of Management at Armenian State University of Economics, PhD in Economics https://orcid.org/0000-0002-6575-6306

## MARIAM MARTIROSYAN

Master's Student of the Chair of Management at Armenian State University of Economics https://orcid.org/0009-0005-6765-4337

## ANALYSIS OF GLOBAL STARTUP MARKET

Alongside with the technological progress, the world economy presents new requirements and issues, which become solvable under the conditions of creation and implementation of innovative ideas. Within the framework of this research, a historical reference has been made to the history of the creation of startups and the formation of the startup ecosystem, as well as the characteristics of startups, stages of development, sources of financing, reasons for failure and the most successful projects are considered, thereby identifying the sectors of the economy that are most promising for the development of startups. By conducting a detailed study on the global market of startups, the trends of their development, the progress registered in the startup ecosystem in recent years, according to economic sectors, countries and individual cities, have been highlighted. Within the framework of the analysis of the global market of startups, a comprehensive reference is made to the Armenian startup ecosystem, the trends of its development and the main sources of financing, as well as the Armenian startup projects, that gained world recognition, have been studied. The results of the research show that along with the progress of time, the development of the startup market is becoming more and more demanded and its impact on global economic development is increasing.

**Keywords:** startup, business angels, venture investors, innovation, project, risk, idea, Armenian startup ecosystem

JEL: F01, M13 DOI: 10.52174/1829-0280\_2023.3-119

**INTRODUCTION.** Currently, the market economy is constantly undergoing radical changes, and in order to develop in these conditions and maintain competitiveness, organizations face new and more up-to-date requirements. Choosing only traditional methods and ideas in the framework of the implementation of activities and business management often hinders companies in the development and expansion of the consumer market. Establishing startups has become one of the effective ways to deal with such changes. Their importance lies in the basis of the fact that startups, based on the successful implementation of innovative ideas, become the primary driving force for economic growth. The real reason startups are created is to change the world for the better and more innovative. As a rule, the key to the success of startups is determined by an individual approach, innovation, interesting business ideas and their active promotion.

There are many definitions of the concept of a startup, but all of them are united by the innovative nature of the activity, the high level of risk, the increase in the volume of sales and profits that are several times higher in a short period of time from the start of the project. More briefly, it can be characterized as a venture project, whose future is quite unclear. Startups are the most important driving force of developing economic system and business establishment. They also serve as the primary means of diversifying the economy and business. By creating fundamentally innovative products, startups expand industries, and very often serve as the starting point for the creation of entirely new ones. The purpose of this article is to carry out a comprehensive analysis related to the history of the formation of the global startup market, statistical indicators characterizing the sector, the study of the experience of leading countries and sectors, as well as the identification of expected trends for the coming years, which can significantly contribute to increasing the efficiency of market participants' performance.

**LITERATURE REVIEW.** The topic of newly created startups, startup markets and startup ecosystems are currently considered quite up-to-date. The research on startups has recently begun and developed rapidly.

First, let us discuss the definitions of the concept of "startup" with the interpretation of different researchers. Michelle Grant gives the following definition in her work on startups: "The term startup refers to the initial stages of an organization's activity. The latter is a company that is in the primary stage of business. Startups usually do not have a fully developed business model and, more importantly, do not have the necessary capital to develop and "move" to

the next stage. These organizations generally start their operations with high costs and limited revenues, that is why they seek investment from various sources, most notably venture capitalists."

Concerning one of the main characteristics of startups - riskiness, the author points out that, "Startups are primarily characterized by high risk, because failure is more than possible, but at the same time, if successful, startups can turn into unique companies to operate with great advantages, a focus on innovation and great opportunities to learn." (Grant, 2022).

"Forbes" magazine presents the main characteristics and typical aspects of startups: "Startups are young organizations founded to develop a unique product or service, bring it to the market, and make it necessary and indispensable for consumers. An innovation-driven startup aims to correct deficiencies in existing products or create entirely new categories of products and services, significantly transforming entrenched ways of DOIng business for various industries. A startup works like any other company when it comes to ultimate success. A group of employees simply work together to create a product that consumers will buy. However, startups differ from other organizations in the way they conduct business and achieve their core goals. Conventional companies can copy what has been done before, they work within an already existing "template", that is, a well-defined scheme of how the business should work. The startup aims to create a completely new "template" (Baldridge & Curry, 2022).

It is well-known that financing is the most important issue in the framework of startups' activities. In the framework of the topic, Carol Kopp presents her research, who in the author's article entitled "Definition, Types and Risks of Startup Capital" classifies the main important steps of establishing startups and then conducts a separate analysis on financing.

Step 1: Defining a unique idea.

- Step 2: Market research to find out how feasible the idea is and whether the current market is suitable for the chosen idea.
- Step 3: Creating a business plan that outlines the company's initial structure, goals, mission, values, and goals.
- Step 4: Financing. This can come from savings, friends, family, investors or a loan.

Step 5: Business registration and obtaining necessary licenses.

In her study the author pays special attention to the concept of "start-up capital" opining that, "The term start-up capital refers to money raised by a start-up company to cover the initial costs of operations. The main sources of start-up capital are venture capitalists, angel investors and, as traditional sources, banks. However, many entrepreneurs prefer venture capital as the main means of financing, because the investors of venture capital do not expect a quick return on investment until the company receives its own profit". (Kopp, 2021).

We can conclude the literature review by Will Kenton's definition of startups given in his article: "Startup is the process of developing a product or creating a company based on basic consumer needs. In startup practice, preliminary experiments are more preferable than sticking to a plan developed in advance. New startups necessarily undertake small-scale releases of early-stage products to gauge customer response to the product." (Kenton, 2022).

Examining the definitions given by different scientists concerning the proposed classifications and the discussed issues, it is worth noting that the topic is still quite concomitant and important, and there are still certain key points, problems and classifications that require more in-depth and multi-faceted studies.

**RESEARCH METHODOLOGY.** This study has been carried out on the basis of statistical analysis, comparison, classification, analysis, extraction and overlay, as well as forecasting methods. Within the framework of the statistical analysis, the development trends and statistical indicators of the global startup ecosystem have been studied and highlighted, thus outlining the most predictable perspectives of the market development. Within the framework of the application of the method, the most favorable regions and sectors of the economy are identified from the point of view of the creation of startups and the expansion of the market. The comparison method has made it possible to carry out a comparison between the past and current statistical indicators of the startup market over the last years, thus highlighting the growth trends and recorded decreases. The most favorable countries and cities for the creation and development of startups are also distinguished according to their attractiveness. Using the classification method, the most successful global startup projects are classified according to the points recorded in the 2023 report on the global competitiveness of startups. By applying the analysis method when studying the international startup market, the characteristics of the most successful startup projects and sectors, the share of venture capital in the GDP of the leading countries have been revealed. Based on the extraction and overlay methods, separate studies were conducted in the global startup ecosystem and conclusions are given regarding the already operating startup projects, as well as the Armenian startup market. Based on the results of the above-mentioned methodology, the most promising sectors of the economy in the development of startups are presented using the forecasting method.

**ANALYSIS.** A startup is a company that is going to introduce an innovative product or service to the consumer, but is currently in the process of searching for business technologies and financial support.

In recent years, startups have become widespread not only in the field of Information Technology, but also in agriculture, industry, healthcare, education and other fields. As research shows, most of the startups stop their activity in the first year of existence, and the reasons for this can be different: financial, planning, management, lack of feedback from consumers, etc. Nevertheless, the startup market remains one of the most promising ones, so our task is to identify the areas that are most promising for the development of startups, as well as to study the real reasons for their failure and possible ways to bypass it. As it has already been mentioned, the problem of financing is big in the development and establishment of startups. Currently, the Internet has become one of the best sources for young startups to find potential investors, and investors find interesting and promising ideas here. As statistical data show, the main sources of funding for startups are:

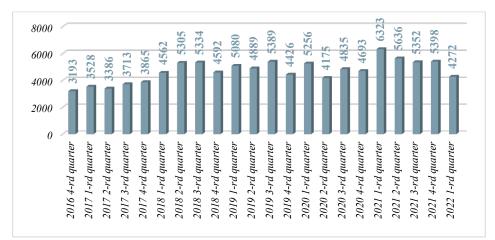
Table 1

# Main sources of funding for startupsbusiness angels25%grande19%venture funds15%corporate investors15%state support funds14%business accelerators12%

Source: Aashish Pahwa, (2023).

**Business angels** are private individuals who invest in a business at the initial stage of an idea. As a rule, they do not require a quick return of the resources invested in the project; their goal is to make a profit in the long run. Usually, investments in startups are not their main source of income.

**Venture funds** invest in startups at the expense of pension funds, insurance companies, individuals. They usually finance high risk projects which will later provide high returns.



# Chart 1. The number of venture capital and business angel financing transactions worldwide, 2016-2022<sup>1</sup>

<sup>&</sup>lt;sup>1</sup> Compiled on the basis of information from the Statista.

Number of seed and angel venture capital deals worldwide from Q4 2016 to Q2 2022. https://www.statista.com/statistics/1243973/seed-and-angel-venture-capital-deals-global/

Observing the chart presented above according to different years, we can point out that the number of executed transactions has started to fluctuate significantly since the beginning of 2020. In recent years, perhaps the highest result was recorded in the first quarter of 2021 (6323 transactions). In the first quarter of 2022, a total of 4,272 transactions were made, which is 2,000 more than the indicator of the first quarter of 2021, and 1,000 more than the indicator of 2020.

In general, in terms of individual years, perhaps the lowest figure was recorded in 2017 - 14,492 transactions, and the highest figure was recorded in 2021 - 22,709 transactions. In 2018, 2019 and 2020, stable dynamics of changes in the number of transactions was recorded.

Sometimes startups also find potential investors through various websites. For this reason, there are special startup exchanges on the Internet, companies that deal only with project financing.

The policy conducted by the state is also of special importance, particularly, it should be aimed at state funding instruments for innovations, as well as increasing the interest of private investors in innovative companies, especially in the field of Information Technologies.

Another important source of financing is the so-called "bootstrapping", which involves the development of a business without external financing. In this case, own funds, funds received from friends, relatives, acquaintances, etc. serve as a source of financing.

Below we present 2017-2022. the increase and decrease registered when financing startups, according to the spheres of their activity.

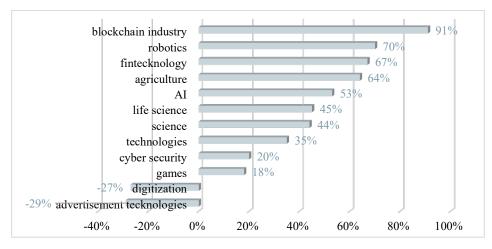


Chart 2. 2017-2022 changes in startup funding by sector<sup>2</sup>

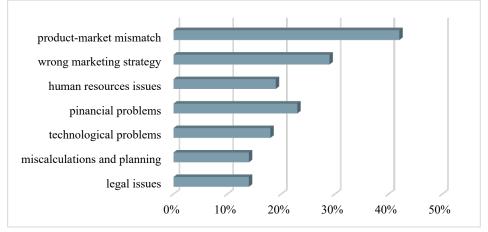
<sup>&</sup>lt;sup>2</sup> Compiled on the basis of information from the Statista.

Change in startup funding worldwide from 2017 to 2022, by selected industries. https://www.statista.com/statistics/882609/growth-startup-funding-by-industry/

Between 2017 and 2022, the blockchain industry recorded the highest funding growth rate of more than 90 percent. Advanced manufacturing and robotics saw the second highest growth in funding at around 70 percent, followed by the fintech industry. On the other hand, funding in the areas of digitization and advertising technology decreased by 27 and 29 percent, respectively (Statista, 2022).

The sharp increase in financing the blockchain industry can be mainly due to the fact that, as a result of automation, blockchain significantly reduces paperwork and obstacles that appear during its implementation, as well as significantly reduces overall and transaction costs, and even sometimes eliminates the necessity to check the transactions by transaction participants, thereby making the sector attractive for investors. As for the fintech sector, the main key to its success is the fact that there are a variety of ways to expand access to capital for small and medium business owners.

Referring to the primary statistics on startups, it is important to note that usually about 70 percent of startups cease their activities in the first year of existence, and of the remaining 30 percent, about 40 percent do not survive for two years. As a rule, 75% of venture investments in startups fail, and the reasons for failure are different.

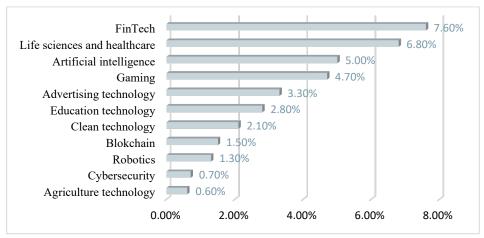


Source: Josh Howarth, (2023).

## Chart 3. Top Reasons for Startup Failure

- product and market mismatch 34%
- wrong marketing strategy 22%
- various issues related to team and human resources 18%
- inefficient use of cash flows and financial problems 16%
- technology issues, including weak cybersecurity and outdated solutions -6%
- suboptimal operations due to miscalculations and planning -2%
- legal issues which are one of the main reasons for the failure of startups 2%

Other reasons include improper time management, wrong division of cofounders' work (ideally, one is engaged in designing products/services and the other in its promotion), weak management, lack of experience, force majeure situations, etc.



Source: Jason Wise, (2023).

## Chart 4. Distribution of startups by sectors in 2023

As mentioned above, the fintech sector significantly improves the quality of financial services through the use of automation technologies. Startups in this sector focus on a variety of operations such as mobile application development for online payments, online lending and insurance, personal finance management, etc. Startups in the fintech sphere are extremely relevant nowadays, and besides, by reducing as much as possible transaction costs and the direct participation of the parties in the transaction, they attract potential consumers, thereby stimulating the creation of new organizations in the field. At the core of fintech activity is the use of artificial intelligence, which is mainly used in the framework of effective analysis of financial and personal data and maintaining direct contact with customers. Due to the year-on-year increase in chronic diseases and the need to implement preventive measures, healthcare startups specialize in the creation of innovative medical technologies and the development of digital healthcare.

Turning again to financing, let us also present the distribution of the most successful startups financed by venture capital, according to the fields of activity, in the form of the chart below.

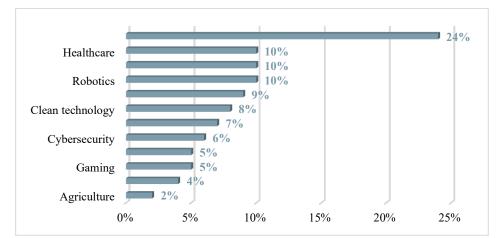


Chart 5. The most successful startups funded by venture capital by industry 2023<sup>3</sup>

For the last 5 years, the field of artificial intelligence has been considered a field with the largest number of startups financed by venture capital. The number of transactions with venture capital in the sector is <sup>1</sup>/<sub>4</sub> of the global venture capital transactions.

Healthcare, fintech and robotics are significantly behind the field of artificial intelligence, registering around 10 percent of transactions. The lowest indicator of the implementation of transactions through venture capital is recorded in the agricultural sector, a result of around 2 percent. However, apart from the above- mentioned, it is necessary to state the fact that during the last 5 years the field of venture capital has registered an unprecedented growth of about 64 percent in the implementation of transactions. According to statistical data, about 305 million startup companies are created every year. On average, only 10% of all these startups survive and become full-fledged business enterprises. The remaining 80% - 90% end up in the "black hole", and 50% of the above 10% successful startups fail after five years in the market, thus startup funding is extremely important in order to overcome this high "mortality" rate. However, despite such a high failure rate of startups, the number of startups is growing every year, making it one of the fastest growing trends in business today (Wise, 2023). If we look at startups according to different regions, their main share falls on the following continents and countries.

<sup>&</sup>lt;sup>3</sup> Compiled on the basis of information from the Statista.

Distribution of VC-funded startups worldwide in 2022, by industry and deal count. https://www.statista.com/statistics/882615/startups-worldwide-by-industry/

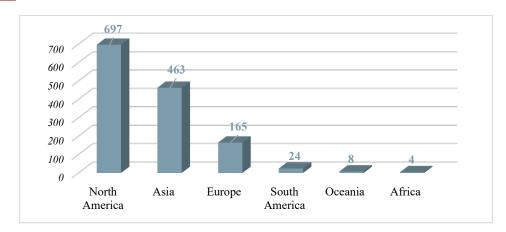


Chart 6. The number of startups according to continents as of April, 2023<sup>4</sup>

Thus, as of April 2023, roughly half of the world's startups were located in North America. The two regions hosting the fewest startups were Oceania and Africa, each hosting 8 and 4 startups, respectively. It is also worth noting that many of the world's most valuable startups are based in North America or Asia.

Table 2

f startups in 2023. as of now				
1.	USA			
2.	United Kingdom			
3.	Israel			
4.	Canada			
5.	Sweden			
6.	Singapore			
7.	Germany			
8.	France			
9.	Australia			
10.	Netherlands			
11.	Switzerland			
12.	China			
13.	Finland			
14.	Estonia			
15.	Spain			
16.	Ireland			
17.	Lithuania			
18.	Japan			
19.	Denmark			
20.	North Korea			

## *The most favorable countries for the creation of startups in 2023. as of now*<sup>5</sup>

The most successful and strongest startup companies are created in the countries located in the rating table. Examining the most valuable startups

Number of unicorns worldwide as of April 2023, by region.

https://www.statista.com/statistics/1092626/number-of-unicorns-in-the-world-by-region/ <sup>5</sup> Compiled on the basis of information from the Statista.

Leading countries for startups worldwide in 2023, by total score. Statista.

<sup>&</sup>lt;sup>4</sup> Compiled on the basis of information from the Statista.

https://www.statista.com/statistics/1275240/leading-countries-startups-worldwide/

around the world, it is noteworthy that 3 of the top 10 companies in the rating table - Space-X, Stripe and Databricks - operate in the USA. Great Britain is in the second position of the table, among the startups operating in it, Revolut, worth 28 billion, is also in the top ten of the most valuable startups. What is interesting here is the fact that China is ranked 12th in the list of the most favorable countries for the creation of startups, while 5 of the top 10 most valuable startups in the world - ByteDance, Ant Group, Shein, WeBank and Cainiao - operate in China. This is due to the fact that China has a large population and a rapidly developing economy, which in turn attracts investors and talented individuals.

As for cities, the best cities for creating startups are:

Table 3

1.	San Francisco
2.	New York
3.	London
4.	Los Angeles
5.	Boston
6.	Pekin
7.	Shanghai
8.	Bangalore
9.	Paris
10.	Tel Aviv
11.	Berlin
12.	Seattle
13.	New Delhi
14.	Tokyo
15.	Chicago
16.	Shenyang
17.	St. Paul
18.	Washington
19.	Stockholm
20.	Singapore

# The most favorable cities for the creation of startups in 2023. as of now<sup>6</sup>

The top 10 cities of the startup ecosystem ranking remained stable in 2022 recorded their positions, except for the last two cities (Paris and Tel Aviv), which, "exchanged" positions. San Francisco (Silicon Valley) received the highest score in the ranking table of the startup ecosystem. The main reason for the latter is the fact that the city is known for the concentration of high-tech companies, venture capital investors and the most successful startups. Tel Aviv is considered the first in the "innovation ecosystem" category. The abovementioned is due to the fact that the city has a unique "startup culture" and

<sup>6</sup> Compiled on the basis of information from the Statista.

Leading cities for startups worldwide in 2023, by total score. https://www.statista.com/statistics/1275209/top-cities-

forstartupsworldwide/#:~:text=Leading%20cities%20for%20startups%20worldwide%202023%2 C%20by%20total%20score&text=The%20total%20score%20of%20San,London%20followed%2 0in%20third

is known for the presence of the most innovative companies and startups, especially in the technological sector of the economy. The ranking also includes some emerging startup hubs, including Seoul, Shanghai and Beijing, which have had a significant growth in the number of startups in recent years. The latter is due to the fact that the aforementioned cities have large populations and growing economies, which makes them more attractive to startups and investors (Safdie, 2023).

As for the study of the most valuable startups in the world, below we present the 10 most valuable startups according to the data of 2023 in the form of a table.

The world's most valuable startups in 2023							
Rank	Company	Valuation (US\$bn)	Country	Sector	Year Founded		
1.	ByteDance	200	China	Social Media	2012		
2.	SpaceX	137	USA	Aerospace	2002		
3.	Ant Group	120	China	Fintech	2014		
4.	Shein	65	China	E-commerce	2012		
5.	Stripe	50	USA	Fintech	2010		
6.	WeBank	33	China	Fintech	2014		
7.	Databricks	31	USA	Big Data	2013		
8.	Telegram	30	UAE	Social Media	2013		
9.	Revolut	28	UK	Fintech	2015		
10.	Cainiao	27	China	Logistics	2013		

The superior day and superior his standard in 2022

Table 4

Source: Anna Papadopoulos, (2023).

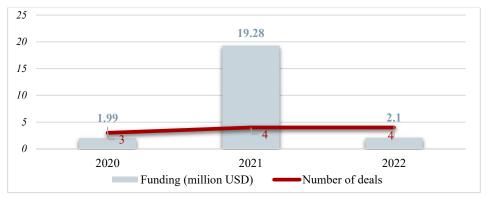
As it can be seen from the table, 4 of the top 10 most valuable startups in the world operate in the fintech sector, which, as already mentioned above, is considered to be the sector with the largest number of successful startup companies in the world in 2023 (about 7.60 percent) (see Chart 4). One of the leaders in the capitalization of the most successful startups is the social media sector. It is primarily related to the success of international companies ByteDance and Telegram, whose value in 2023 will amount to 200 billion and 30 billion US dollars. SpaceX, which expands its activities in the field of aerospace, is in the second place, its value being 137 billion US dollars. The fintech sector provides quite progressive pace thanks to Ant Group, Stripe, WeBank, Revolut companies. High concentration of capitalization (the ratio of segment capitalization to the number of companies) is also observed in sectors such as e-commerce- Shein, and logistics-Cainiao.

In 2021, there were over 590 startups worldwide, with the majority operating in the United States and China. China and the United States have the most valuable startups in the world. While the Chinese market dominates the global startup scene in terms of startup market capitalization, the United States dominates in terms of the number of startups domestically (Statista, 2023).

In recent years, there has also been progress in the startup market in Armenia. Particulary, startups in the Armenian market are mostly spread in the fields of programming, artificial intelligence, cyber security, fintech and gameanimation (Enterprise Armenia, n.d.).

Comparing with international trends, it is noteworthy that the Armenian market in terms of startup development areas is more compatible with the global startup ecosystem (see Chart 4). This circumstance in its turn determines the progressive growth and integration of the Armenian startup market in the global startup ecosystem in recent years. The only exception is the field of cyber security, which is perhaps one of the least developed fields in terms of the distribution of startups in the global startup market. This reality may be due to the fact that startups in the Armenian IT sector have been developing in recent years, that's why ensuring strong cyber security is of primary importance for IT organizations at the initial stage of their development.

As it has been mentioned above many times, the foundation of the creation and successful operation of startups is the search for the necessary financing and investments. In 2022, the value of financing the startup market in Armenia considerably decreased compared to the previous year, 2021, when this indicator reached its peak at around 19.3 million USD. As for the number of transactions, it remained on the same level as in 2021. Below, we present in the form of a chart the dynamics of funding the Armenian startup market over the last three years, according to statistical data.



Source: Darpass, (2020).

# Chart 6. Financing the startup market in Armenia and the number of transactions in 2020 - 2022.

Within the framework of the topic of financing, it is noteworthy to refer to the field of venture capital and its development. The field of venture capital in Armenia has been forming since 2013. Below we briefly present the main venture funds operating in the Armenian market.

"Granatus Ventures". "Granatus Ventures" is the first Armenian venture fund that provides financing and financial advice to newly established innovative organizations in Armenia. The fund has invested in 18 companies so far, among which there are "menu.am", "krisp", "sololearn" (Granatus VENTURES, n.d.).

Hive Ventures. Hive Ventures Fund was established in 2014. It aims to develop the global Armenian technological ecosystem by investing in startup companies created by Armenian entrepreneurs around the world. The fund not only provides venture capital, but also offers mentorship and connections to Silicon Valley venture funds. The fund has financed 21 companies so far , including "Embry", "Streamable", "ServiceTitan", etc (HIVE Ventures, n.d.).

SmartGateVC. "Smartgate" venture fund was established in 2017. It has invested in 25 companies so far, among which there are "SuperAnnotate", "Teamable", "Krisp" and others (SmartgateVC, n.d.).

2020-2022 three more local venture funds were founded:

"Formula VC" has invested in 14 companies so far: "CoinStats", "Boomerang", "Docus", etc (Formula VC, n.d.).

"Big Story VC", the Fund has financed 13 companies, including "Portfolio", "BlueQubit", "Sleep doctor" and others (BIGSTORY VC, n.d.).

There are also business angel networks in Armenia, the most notable of which are:

Business Angels Network of Armenia (BANA). It has financed 25 startup companies so far, the cumulative value of which is estimated at around 180 million USD. It made about 3 million US dollar investment (BANA ANGELS, n.d.).

Angel Investors Club of Armenia (AICA). It has invested in a number of organizations, including "OmegaCoding", "Embry Tech", "Illuria Security" and others (AICA Angel Investor Club of Armenia).

Looking at the "Venture Capital and Private Equity" countries attractiveness index, we note that Armenia ranked 90th among 125 countries in 2021 (Groh, Liechtenstein, Lieser & Biesinger, IESE, Ranking 2021), thus registering a decrease (2018 - Armenia ranked 77th (Groh, Liechtenstein, Lieser & Biesinger, IESE, Ranking 2018), in 2016 - 75th (Groh, Liechtenstein, Lieser & Biesinger, IESE, Ranking 2016)).

In order to indicate the progress of the startup market in Armenia and to highlight the development of venture funds operating in the market and investment activity in general, let us briefly present some of the most successful Armenian startup projects, many of which have turned from startups into popular organizations thanks to venture investments and business angel networks.

## PicsArt

PicsArt is a leading photo and video editing app that has taken the world by storm in a short span of time. Founded in 2012, the platform enables users to seamlessly create, edit and share visual content. The application registers more than 150 million monthly active users from different corners of the world.

## KRISP

Krisp is a noise cancellation technology startup that has quickly gained international recognition. The startup was created in 2017. Krisps software

filters background noise from calls and recordings, thereby improving communication quality. For popular communication platforms like Zoom, Microsoft Teams, and Discord, the Krisp app has become an indispensable tool for industry professionals worldwide.

## GGTaxi

GGTaxi is a popular transportation platform, which can be said to have revolutionized the transportation industry in Armenia and neighboring countries. In 2013, the company expanded its services to Georgia, Russia and other countries in the region. GGTaxi offers affordable and convenient transportation options, including courier and delivery services.

## Embry

Embry is an artificial intelligence-powered virtual assistant designed to help couples to become parents. Launched in 2020, the Embry app offers personalized guidance on couples' health, nutrition and lifestyle. The platform uses advanced machine learning algorithms to analyze user data and provide the most relevant advice.

## Sololearn

Sololearn is an innovative mobile platform that offers comprehensive programming and coding courses. Founded in 2014, the platform has attracted millions of users, becoming one of the most popular educational programming platforms worldwide. With a wide range of courses, Sololearn enables users to develop programming skills at their own pace.(iArmenia, 2023).

Thus, the Armenian startup ecosystem is able to demonstrate real flexibility in the global startup market. Innovation is extremely important for the future of Armenia's industry and economy. The technological sector in Armenia attracts new investments every year, which greatly stimulate the growth of the sector. Armenian startups were created with the initial aim to target the global market, as the domestic market is quite small. "Business Angel Network" plays a major role in market development in Armenia, creating great financing opportunities with "Angel Conference". The fact that the country implements a number of programs to support technological startups, including the definition of tax benefits in the sector, is also very decisive. As for foreign investment, Armenia continues to create free economic zones and full ownership, among other incentives, under the "Foreign Investment" legislative framework to support the latter. Although Armenian startup ecosystems are still in the early stages of their development, there is still significant untapped potential, which is a key factor in the prosperity and development of the startup market in the country (StartupBlink, 2023).

**CONCLUSIONS.** The creation of startups should be in line with the changes that are happening around us and meet the existing requirements. Within the framework of the conducted research, a detailed study has been conducted on the global startup market, as well as on the Armenian startup ecosystem as its

constituent part. The research has shown that, especially in the last 5 years, the international startup ecosystem has developed significantly and registered progressive growth. According to statistical data, nowadays about 305 million startup companies are created annually. On average, only 10% of all these startups become full-fledged business enterprises, and the remaining 80% to 90% fail and end up in the "black hole". Moreover, the incompatibility of the product and the selected market and the wrong marketing strategy prevail among the main reasons for the failure of startups in recent years. The development of the startup ecosystem is primarily related to funding. Funding transactions peaked in 2021 through venture capital and business angel networks, and funding has grown most of all in the blockchain industry in recent years due to automation and ease of transactions. Despite the mentioned above, it should be noted that in 2023 the most successful startups still dominate the fintech sector (4 of the top 10 most valuable companies in the world operate in this sector), which is mainly due to the significant improvement of financial services through automation. In this context, it is also necessary to mention that the most successful organizations of startups, financed by certain venture capital, mostly prevail in the field of artificial intelligence. As of April 2023, approximately half of the world's startups were located in North America, with Oceania and Africa hosting the fewest startups. As for the most favorable regions for the creation of startups, it is necessary to highlight the fact that in recent years China and the USA have respectively the most expensive startups. The leader in the ranking table is the Chinese company "ByteDance", whose market value is estimated at around 200 billion US dollars. Thus, we can conclude that the success of startups today is mainly determined by mechanization and automation. Today as humans influence machines, machines influence people as well. In such a situation, it is particularly important to create such machines that will take over the most tiring and time-consuming processes, enabling people to use their energy more purposefully and efficiently. One of today's important challenges is the widespread distribution of marketplaces, as the sale of goods is moving from an off-line platform to an online one. Ecommerce platforms occupy an increasingly large share, gradually shrinking the market of online stores. International money transfers and the creation of relevant mobile applications, which will become equal competitors in the lending and insurance business (Prosper, Lending.Clup, Sofi, SendFriend) are also becoming quite widespread in the fintech sphere. 3D printers are also in great demand making possible to reduce production costs several times, to get the expected results more accurately. They are used in medicine, construction, engineering, aerospace and other fields. Virtual reality is also considered promising, in particular, people will seek to relax and have fun in virtual reality. Therefore, such large companies as Google, Apple, Facebook, Sony are creating their own VR divisions. Startups formed on the basis of these and similar innovations can have serious development prospects and occupy a stable position in the market. Turning to the Armenian startup ecosystem, it is necessary to note that it is diverse and quite saturated with innovative organizations in various fields. The latter register a progressive increase in activity year after year. From mobile app creation and AI-based activities to successful collaborative projects, Armenian startups are not only making the Armenian economy more innovative, but also have a valuable impact on the global economic arena and the international startup ecosystem. In the RA, starting from 2013, the field of venture capital is developing at a fast pace, which is a solid financial basis for the creation of startups. Necessarily stimulating innovative creativity, setting favorable conditions for the implementation of innovative and more modern ideas, Armenia is rapidly establishing itself as a center of success for innovative entrepreneurship and technological startups.

Currently, the world is changing and developing very quickly, therefore it has a great impact on entrepreneurship and especially on the activities of startups. Observing by sectors, we can conclude that in the international startupecosystem of startups and especially in the Armenian startup market, it is more appropriate to promote digital medicine, the application of artificial intelligence in various fields, personalized diet and food, e-sports, micromobility, biotechnology, nanorobots, Web3, eco-startups, "no code" systems, service and convenience, personalization, wealthtech etc.

## References

- Aashish Pahwa in Startup Guides. (2023, August 7). 13 Types Of Investors For Startups. FEEDOUGH. <u>https://www.feedough.com/types-of-investors/</u>
- 2. AICA Angel Investor Club of Armenia. PORTFOLIO. https://aica.social/portfolio/
- 3. Armenian Startup Ecosystem. (2020, December 16). VCs, Angels and Startup Programs. <u>https://darpass.com/blog/2020/12/16/armenian-startup-ecosystem-vcs-angels-and-startup-programs/</u>
- 4. Baldridge, R., & Curry, B. (2022, October 16). What Is A Startup? The Ultimate Guide. *Forbes ADVISOR*. https://www.forbes.com/advisor/business/what-is-a-startup/
- 5. BANA ANGELS. We co-invested with. https://bana.am/
- 6. BIGSTORY VC. Portfolio. <u>https://www.bigstory.vc/</u>
- Change in startup funding worldwide from 2017 to 2022, by selected industries. Statista. <u>https://www.statista.com/statistics/882609/growth-startup-funding-by-</u> industry/
- 8. ENTERPRISE ARMENIA. General Overview. Promising Areas. https://enterprisearmenia.am/business-opportunities/sector/informationand-communication-technologies/
- 9. formula VC. About Us. Our Portfolio. https://formula.vc/
- 10. Granatus VENTURES. Our Companies. https://www.granatusventures.com/

- 11. Grant, M. (2022, June 18). *What a Startup Is and What's Involved in Getting One Off the Ground*. <u>https://www.investopedia.com/terms/s/startup.asp</u>
- Groh, A., Liechtenstein, H., Lieser, K., & Biesinger, M (Ranking 2016). The Venture Capital & Private Equity Country Attractiveness Index. IESE.
- Groh, A., Liechtenstein, H., Lieser, K., & Biesinger, M (Ranking 2018). The Venture Capital & Private Equity Country Attractiveness Index. IESE.
- Groh, A., Liechtenstein, H., Lieser, K., & Biesinger, M (Ranking 2021). The Venture Capital & Private Equity Country Attractiveness Index. IESE.
- 15. HIVE Ventures. Our Portfolio. https://hiveventures.co/our-portfolio/
- Howarth, J. (2023, March 16). Failure Rate Statistics. Exploding Topics. <u>https://explodingtopics.com/blog/startup-failure-stats</u>
- 17. Kenton, W. (2022, December 23). Lean Startup: Defined, How It Differs From a Traditional Business. *Investopedia*. <u>https://www.investopedia.com/terms/l/lean-startup.asp</u>
- Kopp, M.C. (2021, December 28). Startup Capital Definition, Types, and Risks. <u>https://www.investopedia.com/terms/s/startupcapital.asp</u>
- 19. Leading cities for startups worldwide in 2023, by total score. Statista. <u>https://www.statista.com/statistics/1275209/top-cities-</u> forstartupsworldwide/#:~:text=Leading%20cities%20for%20startups%20 worldwide%202023%2C%20by%20total%20score&text=The%20total%2 0score%20of%20San,London%20followed%20in%20third
- 20. Leading countries for startups worldwide in 2023, by total score. Statista. <u>https://www.statista.com/statistics/1275240/leading-countries-startups-worldwide/</u>
- 21. Leading unicorns worldwide as of April 2023. Statista. https://www.statista.com/statistics/407888/ranking-of-highest-valuedstartup-companies-worldwide/
- 22. Number of seed and angel venture capital deals worldwide from Q4 2016 to Q2 2022. Statista. <u>https://www.statista.com/statistics/1243973/seed-and-angel-venture-capital-deals-global/</u>
- Papadopoulos, A. (2023, April 21). The World's Most Valuable Unicorns 2023. <u>https://ceoworld.biz/2023/04/21/the-worlds-most-valuable-unicorns-2023/</u>
- 24. Ries, E. (2014). Business from scratch. Lean Startup method for quickly testing ideas and choosing a business model. Alpina Publisher.
- 25. Ries, E. (2018). Startup method. Alpina Publisher.
- 26. Santiago Safdie, (2023, April 6). Top 30 Cities for Startup Ecosystems in 2023. Invgate. <u>https://blog.invgate.com/top-cities-forstartup-ecosystems-in-2023</u>
- 27. smartgatevc. OUR PORTFOLIO. https://www.smartgate.vc/
- The Startup Ecosystem of Armenia. Country Ranking. StartupBlink. <u>https://www.startupblink.com/startup-ecosystem/armenia</u>
- 29. Top 10 Armenian Startups. (2023, April 6). iArmenia. https://www.iarmenia.org/top-10-armenian-startups/
- 30. Wise, J. (2023, August 10). How Many Startups Are Created Each Year? (Worldwide Stats). EARTHWEB. <u>https://earthweb.com/howmany-startups-are-created-each-year/</u>