VAHE TUMANYAN
PhD Student of the Chair of Management
of the Public Administration Academy of the Republic of Armenia
🆔 *https://orcid.org/0000-0002-5682-1997*

ROLE OF UNICORN STARTUPS IN DEVELOPING THE COUNTRY'S STARTUP ECOSYSTEM

Unicorns play a vital role in country's startup ecosystem development. Firstly, after a country's startup produces its first unicorn software startup, it gains media popularity being covered by world's famous publishers. Then it becomes more attravtive for both local and foreign investors such as venture capital funds and angel investors. Thirdly and most importantly it impacts the workforce market of the country by creating new jobs. This is apparent specifically in small countries where the number of unicorn startups per capita is pretty high. Unicorns help develop these small countries' startup ecosystems and attract more investment by making the local investment market more sustainable for early-stage startups and by making the ecosystem more famous among foreign investors providing easy access to them for relatively late-stage startups.

Introduction. As soon as a country's startup ecosystem generates a unicorn, it becomes the centre of business world after which the country and the unicorn software startup itself attract more attention of the media and investors both in the local area and worldwide. According to Investopedia within startup community understanding the "unicorn" is a term used in the venture capital industry to describe a privately held startup company with a value of over 1 billion USD. It also adds that the "unicorn" term was first popularized by venture

capitalist Aileen Lee, founder of Cowboy Ventures, a seed-stage venture capital fund based in Palo Alto, California[1]. So, it is vital to understand the impact that unicorn software startups have on the country's startup ecosystem in general as soon as they are born in this ecosystem. In this paper we will examine what kind of influence unicorn software startup generation has on the country's startup ecosystem and how it helps develop the ecosystem in various ways.

Literature Review. For the analysis of the influence unicorn software startups have on country's startup ecosystem this reserach reviews Aileen Lee's "Welcome to the Unicorn Club: Learning from Billion-Dollar Startups." The article, posted on November 2, 2013 in TechCrunch, for the first time used the term "unicorn" within startup and venture capital communities. Before that there were no institutional mentions of the term in these communities, this article established the term which was then used in many occasions and circumstances by these communities' different stakeholders. The article also examines different statistics about unicorns and their valuation taken from Aileen Lee's article and goes further to explain how some tech giants, known as super-unicorn, got created and developed. In addition, the article uses Jennifer Rudden's report on the number of unicorns worldwide as of April 2021 by country accessible in Statista and Wordometers statistics on different countries population as of November 2021 to calculate the number of unicorn software startups per capita. Kalev Aasmae's "This tiny country's startups have raised a billion dollars this year. What's their secret?" article, published on November 5th 2021 and accessible on ZDNet technology news website, gives an insight to how Estonian startup ecosystem developed since its first unicorn Skype. In the end, the article touches the Armenian startup ecosystem by showing how much media coverage Picsart received after becoming Armenian first unicorn software startup. Articles such as Steven Bertoni's "Picsart Is Tech's Newest Unicorn – And Adobe Should Be Afraid", published in Forbes on August 26th 2021, Alex Wilhelm's "Picsart raises $130M from SoftBank, becomes unicorn on the back of its visual creator tools", published in Techcrunch, on August 26th 2021, and Sohini Podder's "Picsart turns unicorn with $130 million funding led by SoftBank", published in Reuters on August 26th 2021, illustrate how popular country's startup ecosystem becomes and how much attention it gets right after it generates its first unicorn.

Research Methodology. This paper firstly takes into consideration and examines the number and valuation of unicorn software startups in the USA from 2003 to 2010. These statistics also show the giants of unicorn club being called super-unicorns that greatly influenced and continue influencing the USA startup ecosystem development. Then it examines the number of unicorn software startups by each country that has at least 1 and combines the statistics on those countries' population to find out the number of unicorn software startups (multiplied by 1 billion for easiness of viewing) in order to understand the

---

[1] **Chen, James** (March 29th, 2021). Unicorn, Investopedia,
https://www.investopedia.com/terms/u/unicorn.asp

efficiency of each country's startup ecosystem examined. Lastly, the research goes deep into understanding how Estonian startup ecosystem changed after the birth of its first unicorn software startup - Skype and how it influenced the popularity of the country's startup ecosystem, investment both locally and abroad, and the workforce market by generating new workplaces. As Armenian startup ecosystem gave birth to its first unicorn software startup relatively recently in August 2021, the paper touches upon Armenian startup ecosystem changes which were demonstrated by a lot of media coverage for Picsart after which the rest of the development and influence is yet to come to fruition in the future.

Analysis. The first time Aileen Lee wrote about unicorns in the venture capital world was in her article "Welcome to the Unicorn Club: Learning from Billion-Dollar Startups", posted on November 2, 2013 in TechCrunch. In her article she built a dataset of U.S.-based tech companies (mostly software startups) started since January 2003. The data was based on publicly available sources, such as CrunchBase, LinkedIn, and Wikipedia. There she estimated that only 0.07% or 39 tech companies of all software startups are privately held companies that have equal to or more than 1 billion USD valuation each. She named these software startups as unicorns because they were so rare according to her findings in the article that it was as if they were trying to find a mythical unicorn. The number of all software startups varied according to different sources, but they calculated that it was at 60,000 level for the past decade. This meant that 1 in every 1,538 software startups became unicorns for the selected timeframe. In addition, she found out that 4 unicorns were born each year with Facebook being the "super-unicorn" of the so called "Unicorn Club" having an estimated of more than 100 billion USD valuation. She also found out that 1 to 3 so called "super-unicorns" had been born each recent decade and San Francisco city was the leader of unicorns being called the home of unicorns. These statistics show that it is pretty difficult for software startups to become a full unicorn by crossing that 1 billion USD mark for which the odds in comparison are similar to being struck by a lightning in one's lifetime or more than 100 times harder than getting into Stanford University in Stanford, California. The distribution among these unicorn startups by being either a consumer-oriented or enterprise-oriented software startups is shown in the chart below.
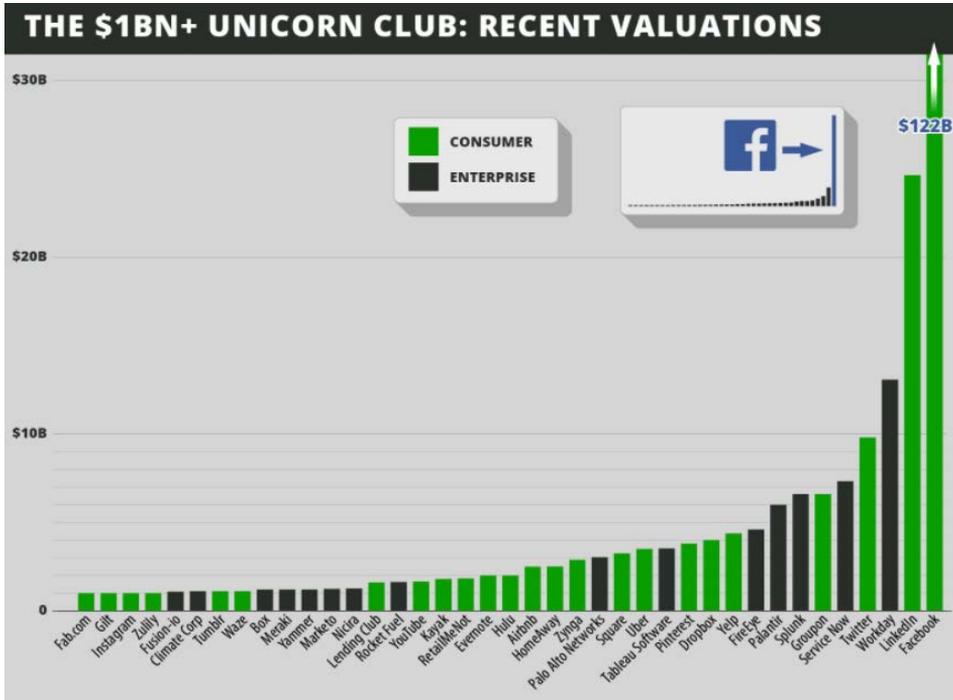
Chart 1.   *The 1+ billion USD Unicorn Club: Recent Valuations for 2013[2]*

The article, as we mentioned, describes Facebook as the super-unicorn of this club accounting for almost half of the $260 billion aggregate value of the companies on the list. Prior decades' super-unicorns included Google, that was founded in the 1990s, and now is worth 3 times more than Facebook, then Amazon, which was founded again in the 1990s, and now has 160 billion USD valuation. The next super-unicorn that was this time founded in the 1980s was Cisco, then Apple, which was founded in the 1970s, and now is the most valuable company in the world, then Oracle, Microsoft and Intel, which were founded in the 1960s. This type of decade separation for super-unicorns defines each era of technology development. So, the 1960s marked the era of the semiconductor; the 1970s - the birth of the personal computer; the 1980s - a new networked world; the 1990s - the dawn of the modern Internet; and in the 2000s new social networks were built; each decade of innovation having an era-specific super-unicorn software startup. The research shows that the year when the most unicorns were born was in 2007 counting 8 unicorn software startups, the fewest were born in 2003, 2005, 2008 and 2010. The chart below demonstrates the number of unicorns born each year starting from 2003 to 2010.

[2] **Lee, Aileen** (November 2nd, 2013). Welcome To The Unicorn Club: Learning From Billion-Dollar Startups. https://techcrunch.com/2013/11/02/welcome-to-the-unicorn-club/

NUMBER OF UNICORNS* FOUNDED BY YEAR VS DJIA

* U.S.-based companies started since 2003 and valued at over $1 billion by public or private market investors
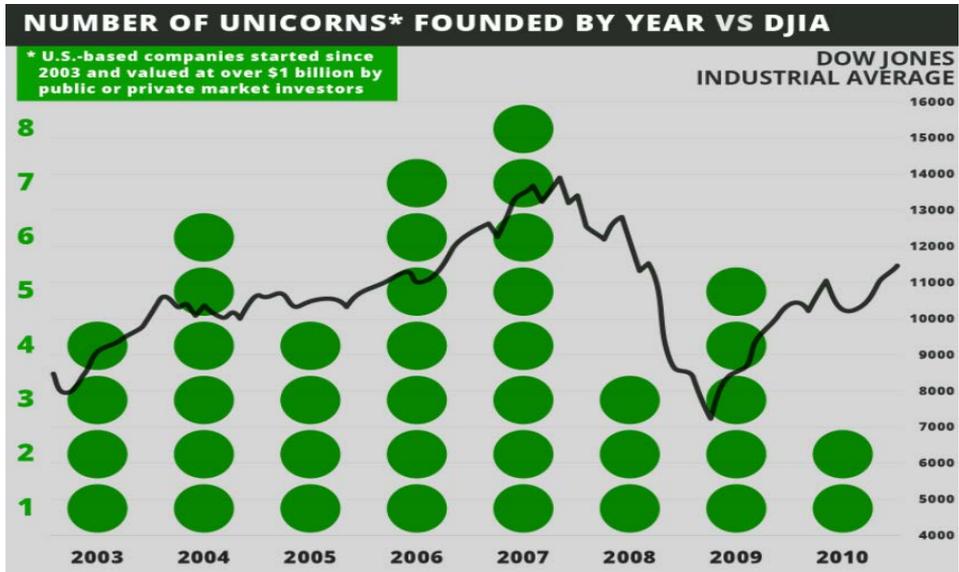
DOW JONES INDUSTRIAL AVERAGE

Chart 2. *Number of Unicorns Founded by Year vs DJIA[3]*

As already mentioned, the Bay Area, especially San Francisco city is home to the vast majority of unicorn software startups. 27 of 39 on the list are based in the Bay Area: 15 being headquartered in San Francisco city, 11 are on the Peninsula and 1 is in the East Bay. New York City has emerged as the number 2 city for unicorn software startups, home to 3. Seattle and Austin each being home to 2 unicorn software startups are the next most-concentrated cities for unicorns[4].

According to Statista the number of unicorns worldwide as of April 2021 by country is as follows.

As the above-mentioned chart shows, the USA is the dominant in the world in having unicorns, counting to 288 unicorn software startups as of April, 2021. The next big country is not surprisingly China, having 133 unicorn software startups. After China the Gap is significant between the 2nd and 3rd placed countries, as India has 76.5% less unicorn software startups than China, or 32 unicorn software startups. The United Kingdom, Germany, South Korea, Israel, Brazil and France are in solid positions having from 8 to 27 unicorn software startups, respectively. It is worth mentioning that small countries having less than 5 million population as of November 20th, 2021, like Uruguay, Luxembourg, Lithuania, Croatia, Ireland, Bermuda and Estonia, are also included in the list having each 1 unicorn software startup in their respective countries (except for Uruguay which has 2), which is a pretty significant result for them6. With these data, we can also count the number of unicorn software startups per capita for each country taking into consideration also population of each country.

---

[3] **Lee, Aileen** (November 2nd, 2013). Welcome To The Unicorn Club: Learning From Billion-Dollar Startups. https://techcrunch.com/2013/11/02/welcome-to-the-unicorn-club/

[4] Ibid.

[6] **Rudden, Jennifer** (2021). Number of unicorns worldwide as of April 2021 by country, Statista, 2021. https://www.statista.com/statistics/1096928/number-of-global-unicorns-by-country/

Woldometer gives us a good understanding of each country's population as of November 20th, 2021[7] and, combining that with the number of unicorn software startups for each country, we can calculate the number of unicorn software startups per capita.
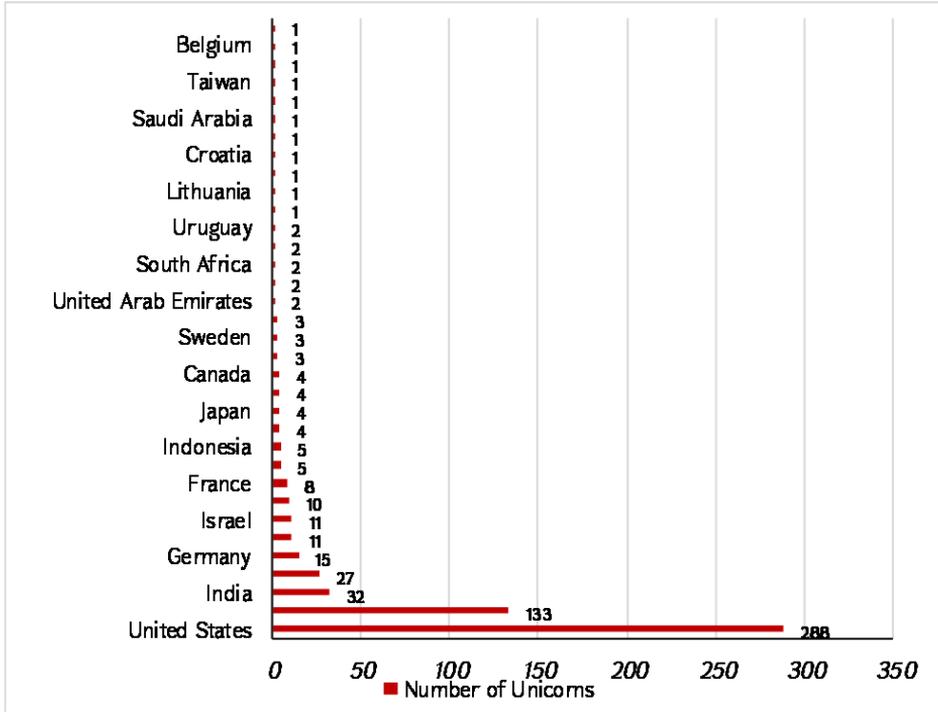

Chart 3. *Number of Unicorns Worldwide as of April 2021 by Country*[5]

Table 1 illustrates that the smallest countries dominate the number of unicorn software startups per capita (to easily illustrate the numbers, this indicator was multiplied by 1 billion). We see that such small countries as Bermuda, Luxembourg, Estonia and Uruguay are among the top 10 by the number of unicorn software startups per capita. China and India are on the bottom of the list which shows how inefficient their unicorn startup ecosystem is compared to their number of populations. The USA is strongly on the 4th position which indicates their efficient unicorn startup ecosystem along with Israel being the 3rd. It is worth mentioning that although Switzerland, Hong Kong and Singapore have more than 5 million population and less than 10 million population, they are among the top 10 by the number of unicorn software startups per capita. Other small countries like Lithuania, Croatia and Ireland are positioned respectively on the 11th, 13th and 15th places, which is a pretty remarkable result for them concluding that their unicorn startup ecosystem particularly and the startup ecosystem in general is very efficient compared to their numbers of populations.

[7] Worldometer (2021), https://www.worldometers.info/ (last accessed on 15.11.2021)

[5] **Jennifer Rudden** (2021), Number of unicorns worldwide as of April 2021 by country, Statista, 2021, https://www.statista.com/statistics/1096928/number-of-global-unicorns-by-country/

Table 1

Number of Unicorn Software Startups per capita* 1 billion

Country	Number of Unicorns	Population	Number of Unicorns per capita * 1 billion
Bermuda	1	61,960	16139.44
Luxembourg	1	640,041	1562.40
Israel	11	8,842,469	1244.00
United States	288	333,685,997	863.09
Estonia	1	1,327,769	753.14
Uruguay	2	3,490,376	573.00
Switzerland	5	8,742,109	571.94
Hong Kong	4	7,581,049	527.63
Singapore	3	5,913,938	507.28
United Kingdom	27	68,379,033	394.86
Lithuania	1	2,669,715	374.57
Sweden	3	10,186,321	294.51
Croatia	1	4,070,239	245.69
South Korea	11	51,330,207	214.30
Ireland	1	5,013,998	199.44
United Arab Emirates	2	10,055,499	198.90
Germany	15	84,154,389	178.24
Netherlands	3	17,187,301	174.55
Australia	4	25,908,673	154.39
France	8	65,473,247	122.19
Canada	4	38,199,508	104.71
China	133	1,447,008,903	91.91
Belgium	1	11,659,362	85.77
Brazil	10	14,648,031	46.59
Spain	2	46,779,825	42.75
Taiwan	1	23,876,389	41.88
Colombia	2	51,632,304	38.74
South Africa	2	60,341,738	33.14
Japan	4	125,940,852	31.76
Saudi Arabia	1	35,562,627	28.12
India	32	1,398,753,940	22.88
Indonesia	5	277,520,311	18.02
Philippines	1	111,595,843	8.96
Mexico	1	130,804,612	7.64

The country's startup ecosystem ability to generate unicorns is vital for its startup ecosystem development and ecosystem's ability to attract investment. First of all, it brings recognition to the country's startup ecosystem because this milestone of crossing the 1 billion USD mark and joining the unicorn club is covered by a lot of media. The media likes speaking to its audience via numbers and numbers attract the most attention of the readers and viewers. This is why crossing 1 billion USD valuation mark for startups is not just a symbolic achievement, but also a vital marketing tool to get recognized and attract more investment for themselves and other startups originating by the same country's startup ecosystem. Secondly, as we have already mentioned in getting famous aspect of advantage, as more and more software startups cross that 1 billion USD valuation mark, the country they come from becomes more reliable for investment and investors are more inclined to invest in such countries' startup ecosystems than the others. The amount of investment can grow exponentially if

that country's startup ecosystem generates unicorns. Thirdly, crossing 1 billion USD valuation mark speaks about the sustainability and the potential of the country's startup ecosystem which in turn can generate more players that help develop the country's startup ecosystem in general. Such players may be startup incubators, accelerators, business angels who besides investment also become in way mentors for startups by sharing their vast experience and knowledge in startups. This was highly present in Estonian startup ecosystem when a couple of Estonian software engineers teamed up with Swedish entrepreneur Niklas Zennström and Dannish entrepreneur Janus Friis and built VoIP telecommunications service Skype. After quickly getting international popularity and investment, the company was sold to eBay in 2005 for 2.6 billion USD, giving the Estonian startup ecosystem its first unicorn. After that even in Coronavirus crisis time period Estonian startup ecosystem managed to raise over 1billion USD of investment in the first 10 months of 2021, doubling that of the previous record for the whole of 2020. In a country of 1.3 million people, more than 30 startups have gained investment rounds of over 1 million euros in the first 10 months of this year, with mobility company Bolt (620 million euros in 2021), AI-based customer service platform Glia (64 million euros in 2021), identity verification platform Veriff (58 million euros in 2021), and ultra-capacitor manufacturer Skeleton Technologies (29 million euros in 2021) taking the first, second, third and fourth spots. This effect is known in Estonia as the "Skype effect", or otherwise known in the world the "unicorn effect". After Skype's sale not only that money was injected back to the Estonian startup ecosystem, but it also inspired other Estonians to become entrepreneurs themselves and create the next Estonian unicorn. For example, Taavet Hinrikus – Skype's very first employee – went on to co-found TransferWise (now Wise), a multi-billion-euro company now listed on the London Stock Exchange. CRM platform Pipedrive, which was valued at about 1.5 billion USD in 2020, after receiving a majority investment from Vista Equity Partners, was co-founded by former Skype employee Martin Tajur. Martin Villig is another former Skype employee. He went on to co-found Bolt, which was valued at approximately 4.75 billion USD in its latest investment round, in August 2021. These, and other companies founded by ex-Skype employees, have employed thousands of people in Estonia and have provided valuable experience for the next wave of startup entrepreneurs. In the process, a lot of money has been reinvested into Estonia's startup ecosystem as well marking the 2nd most valuable effect of Skype. Skype's success helped Estonian software startups to get more famous among worldwide venture capital funds and angel investors by removing much of the reliance on overseas investors. It also helped develop local investor community for an early-stage startup by which Estonian software startups no longer struggle to get investment at a relatively early stage of their development. In addition, according to statistics from Estonian startup hackathon organization Garage48, in the first 10 months of 2021, local investors injected more than 42 million euros into local startups. In comparison, the figure for the entirely of 2021 was 31 million euros[8].

---

[8] **Kalev Aasmae** (November 5th, 2021) This tiny country's startups have raised a billion dollars this year. What's their secret?, ZDNet, https://www.zdnet.com/article/success-breeds-success-how-one-countrys-startups-raised-a-billion-dollars-in-just-10-months/

Armenia also saw the birth of its first unicorn in August 2021, when Picsart raised 130 million USD from SoftBank's Vision Fund 2. After that, numerous articles about Armenian first unicorn started to appear such as articles in Forbes[9], Techcrunch[10] and Reuters[11]. Now we need to see what happens next for Picsart and Armenian startup ecosystem in general, following the birth of their first unicorn. We are currently unable to assess other impacts on the Armenian startup ecosystem derived from Picsart becoming a unicorn, because it is relatively new phenomenon that has happened recently. However, we can assess another startup's full impact, whose founders are Armenians based in the USA, which also helped Picsart raise 130 million USD from SoftBank's Vision Fund 2 and become Armenian startup ecosystem's first unicorn. The name of this startup is ServiceTitan which was founded by 2 Armenians in the USA and is currently valued at 8.3 billion USD after it has raised 500 million USD in series F funding round led by Tiger Global and Sequoia Capital Global Equities, and with participation of current investors such as Battery Ventures, Bessemer Venture Partners, Dragoneer Investment Group, Durable Capital, Iconiq, Index Ventures and T. Rowe Price[12]. It was in November 2018 that ServiceTitan became a unicorn being valued at 1.65 billion USD at that time after 165 million USD in Series D funding round led by Index Ventures, with the participation of Dragoneer and T. Rowe Price and existing investors Battery Ventures, Bessemer Venture Partners and ICONIQ Capital[13]. After becoming a unicorn, ServiceTitan opened an office in Armenia in 2019, which was the next impact on Armenian startup ecosystem that this phenomenon provided[14]. In 2021, Service Titan acquired ServicePro, an Ohio pest control business[15] for which they also recruit employees in Armenian office with that helping create new workplaces in Armenia. In September 2021, ServiceTitan reached the 8th position on "The Cloud 100: Forbes' Definitive Ranking of The Best, Brightest, Most Valuable Private Companies in The Cloud"[16] marking another coverage from one of the world's most famous media, which is Forbes. It is specifically ServiceTitan's

[9] **Bertoni, Steven** (August 26th, 2021) Picsart Is Tech's Newest Unicorn — And Adobe Should Be Afraid, Forbes, https://www.forbes.com/sites/stevenbertoni/2021/08/26/picsart-is-techs-newest-unicorn-and-adobe-should-be-afraid/?sh=13e5ea546673

[10] **Wilhelm, Alex** (August 26th, 2021), Picsart raises $130M from SoftBank, becomes unicorn on the back of its visual creator tools, Techcrunch, https://techcrunch.com/2021/08/26/picsart-raises-130m-from-softbank-becomes-unicorn-on-the-back-of-its-visual-creator-tools/

[11] **Podder, Sohini** (August 26th, 2021) Picsart turns unicorn with $130 million funding led by SoftBank, Reuters, https://www.reuters.com/article/us-picsart-funding-idUSKBN2FR1IU

[12] **Conrad, Alex** (March 26th, 2021) ServiceTitan, Software Provider For Tradespeople, Reaches $8.3 Billion Valuation, Forbes, https://www.forbes.com/sites/alexkonrad/2021/03/26/servicetitan-software-provider-for-tradespeople-reaches-85-billion-valuation/?sh=20bed6ac1917

[13] **Ripley, Heather** (November 14, 2018), ServiceTitan Secures $165 Million in Series D Funding, Cision PR newswire, https://www.prnewswire.com/news-releases/servicetitan-secures-165-million-in-series-d-funding-300750284.html

[14] **Titan, Service** (March 11th, 2019) ServiceTitan Opens Office in Armenia, SercviceTitan, https://www.servicetitan.com/press/servicetitan-opens-office-in-armenia

[15] **Persinger, Mike** (February 2nd 2021), Family Business: ServicePro, ServiceTitan Find Common Ground, Common Values, ServiceTitan, https://www.servicetitan.com/blog/servicepro-servicetitan

[16] Forbes (August 10th, 2021), The Cloud 100: Forbes' Definitive Ranking of The Best, Brightest, Most Valuable Private Companies in the Cloud, Forbes, https://www.forbes.com/cloud100/#2d3aafab5f94

success in becoming a unicorn and having ties to Armenia that brought the attention of investors around the globe to Armenian startup ecosystem which then almost 3 years later gave birth to its first software startup unicorn, because Picsart was able to close 130 million USD funding round led by foreign investors. ServiceTitan becoming a unicorn also made them accessible to raise more funds for the following series E and F. After becoming a unicorn Picsart acquired another Armenian startup DeepCraft which specialises in computer vision and AI[17], which is another example of an impact of unicorn creation on the country's startup ecosystem. Other Armenian startups also currently have access to foreign investment, thanks to ServiceTitan and Picsart. One of them is SuperAnnotate which raised 14.5 million USD[18] from foreign investors. The next example is Armenian CodeSignal which raised 50 million USD in series C funding round led by Index Ventures and with participation of Menlo Headline and A Capital bringing the total fundraising to 87.5 million USD[19]. Then came Intelinair that raised $20 million in series B funding round led by the Regulator Group, LLC, Scientia Ventures, Takiff LLC, SDMC Ag Inc.[20]. And, finally, Cognaize, operating in FinTech industry, that was able to raise 2 million USD investment for its seed round led by the US-based BAJ Accelerator and Argonautic Ventures, with Metaplanet Holdings (backed by Skype co-founder Jaan Tallinn and early investor in Google DeepMind) and one of the leading VC's in Armenia Granatus Ventures joining to close out the round. Business Angels such as Jeff Ingber, former SVP of the US Federal Reserve Bank of New York, and Dr. Armen Kherlopian who serves on the Scientific Advisory Board of NASA-backed TRISH also participated in the round[21].

Conclusion. We can conclude that the country's ability to generate unicorn software startups have a huge impact on their startup ecosystem's sustainable and continuing development. Firstly, the generation of unicorn software startups attracts more attention from the media to the startup itself and then as a continuation to the country's startup ecosystem by getting a lot of coverage from famous media players from different countries. Secondly, it also makes the country's startup ecosystem more attractive for venture capital funds and angel investors abroad and more accessible to get investment in general, as the birth

---

[17] AIT News Desk (December 4rd, 2021), Picsart To Acquire Computer Vision And AI Company DeepCraft, AIthority, https://aithority.com/computing/computer-vision-computing/picsart-to-acquire-computer-vision-and-ai-company-deepcraft/

[18] **Szkutak, Rebecca** (July 12th, 2021), SuperAnnotate Raises $14.5 Million To Help Automate The Computer Vision Pipeline, Forbes, https://www.forbes.com/sites/rebeccaszkutak/2021/07/12/superannotate-raises-145-million-to-help-automate-the-computer-vision-pipeline/?fbclid=IwAR3_ZU32WMhOhQFQDrXemZ5yQPb72Aqa TXJQyWMmwaMjtBhcCwjsAsXkyV8&sh=545a3af16920

[19] **Hall, Christine** (September 16th, 2021), CodeSignal secures $50M for its tech hiring platform, TechCrunch, https://techcrunch.com/2021/09/16/codesignal-secures-50m-for-its-tech-hiring-platform/

[20] Cision PR newswire (September 24th, 2021), Intelinair Raises $20 Million in Series B to Expand Flagship Platform AGMRI, https://www.prnewswire.com/news-releases/intelinair-raises-20-million-in-series-b-to-expand-flagship-platform-agmri-301384702.html

[21] Banks.am (November 2nd, 2021), Armenian fintech company cognaize receives $2 million venture investment, https://banks.am/en/news/fintech/22265

of a unicorn software startup makes the country's startup ecosystem more sustainable for development and brings up a potential in the eyes of different types of investors both locally and internationally. It also inspires birth of new generation entrepreneurs who aim to generate the next unicorns in their respective countries and to drive more successful startup, investment and workforce community by creating more workplaces in the country. Specifically, Estonian unicorn software startup Skype's example thoroughly shows how the amount of the sale of the company got injected back to the country's startup ecosystem, created new workplaces and inspired their employees to go on solo and establish their own software startups which further developed their startup ecosystem.

References

1. Chen, James (March 29th, 2021), Unicorn, Investopedia, 2021, https://www.investopedia.com/terms/u/unicorn.asp,
2. Lee, Aileen (Nobember 2nd,2013) Welcome To The Unicorn Club: Learning From Billion-Dollar Startups, Techcrunch, https://techcrunch.com/2013/11/02/welcome-to-the-unicorn-club/,
3. Rudden, Jennifer (2021), Number of unicorns worldwide as of April 2021 by country, Statista, 2021, https://www.statista.com/statistics/1096928/number-of-global-unicorns-by-country/,
4. Worldometer (2021), https://www.worldometers.info/ (last accessed on 15.11.2021),
5. Aasmae, Kalev (November 5th, 2021) This tiny country's startups have raised a billion dollars this year. What's their secret?, ZDNet, https://www.zdnet.com/article/success-breeds-success-how-one-countrys-startups-raised-a-billion-dollars-in-just-10-months/,
6. Bertoni, Steven (August 26th, 2021), Picsart Is Tech's Newest Unicorn – And Adobe Should Be Afraid, Forbes, https://www.forbes.com/sites/stevenbertoni/2021/08/26/picsart-is-techs-newest-unicorn-and-adobe-should-be-afraid/?sh=13e5ea546673,
7. Wilhelm, Alex (August 26th, 2021), Picsart raises $130M from SoftBank, becomes unicorn on the back of its visual creator tools, Techcrunch, https://techcrunch.com/2021/08/26/picsart-raises-130m-from-softbank-becomes-unicorn-on-the-back-of-its-visual-creator-tools/,
8. Podder, Sohini (August 26th, 2021), Picsart turns unicorn with $130 million funding led by SoftBank, Reuters, https://www.reuters.com/article/us-picsart-funding-idUSKBN2FR1IU.
9. Conrad, Alex (March 26th, 2021) ServiceTitan, Software Provider For Tradespeople, Reaches $8.3 Billion Valuation, Forbes, https://www.forbes.com/sites/alexkonrad/2021/03/26/servicetitan-software-provider-for-tradespeople-reaches-85-billion-valuation/?sh=20bed6ac1917.
10. Ripley, Heather (November 14th, 2018), ServiceTitan Secures $165 Million in Series D Funding, Cision PR newswire, https://www.prnewswire.com/news-releases/servicetitan-secures-165-million-in-series-d-funding-300750284.html.

11. ServiceTitan (March 11th, 2019) ServiceTitan Opens Office in Armenia, SercviceTitan, https://www.servicetitan.com/press/servicetitan-opens-office-in-armenia.
12. Persinger, Mike (February 2nd, 2021), Family Business: ServicePro, ServiceTitan Find Common Ground, Common Values, ServiceTitan, https://www.servicetitan.com/blog/servicepro-servicetitan.
13. Forbes (August 10th, 2021), The Cloud 100: Forbes' Definitive Ranking of The Best, Brightest, Most Valuable Private Companies in the Cloud, Forbes, https://www.forbes.com/cloud100/#2d3aafab5f94.
14. AIT News Desk (December 4th , 2021), Picsart To Acquire Computer Vision And AI Company DeepCraft, Althority, https://aithority.com/computing/computer-vision-computing/picsart-to-acquire-computer-vision-and-ai-company-deepcraft/.
15. Szkutak, Rebecca (July 12th, 2021), SuperAnnotate Raises $14.5 Million To Help Automate The Computer Vision Pipeline, Forbes, https://www.forbes.com/sites/rebeccaszkutak/2021/07/12/superannotate-raises-145-million-to-help-automate-the-computer-vision-pipeline/?fbclid=IwAR3_ZU32WMhOhQFQDrXemZ5yQPb72AqaTXJQyWMmwaMjtBhcCwjsAsXkyV8&sh=545a3af16920.
16. Hall, Christine (September 16th, 2021), CodeSignal secures $50M for its tech hiring platform, TechCrunch, https://techcrunch.com/2021/09/16/codesignal-secures-50m-for-its-tech-hiring-platform/.
17. Cision PR newswire (September 24th, 2021), Intelinair Raises $20 Million in Series B to Expand Flagship Platform AGMRI, https://www.prnewswire.com/news-releases/intelinair-raises-20-million-in-series-b-to-expand-flagship-platform-agmri-301384702.html.
18. Banks.am (November 2nd, 2021), Armenian fintech company cognaize receives $2 million venture investment, https://banks.am/en/news/fintech/22265.

ՎԱՀԵ ԹՈՒՄԱՆՅԱՆ

*Հայաստանի Հանրապետության պետական կառավարման
ակադեմիայի կառավարման ամբիոնի ասպիրանտ*

Միաեղջյուր ստարտափների դերը երկրի ստարտափ էկոհամակարգի զարգացման գործում.– Միաեղջյուրները կենսական դեր են խաղում երկրի ստարտափ էկոհամակարգի զարգացման մեջ: Նախ` այն բանից հետո, երբ երկրի ստարտափը թողարկում է իր առաջին ծրագրային ապահովման միաեղջյուր ստարտափը, ձեռք է բերում հայտնիություն լրատվամիջոցների շրջանում` լուսաբանվելով աշխարհի հայտնի հրատարակիչների կողմից: Այնուհետև` ավելի գրավիչ է դառնում ինչպես տեղական, այնպես էլ օտարերկրյա ներդրողների համար, ինչպիսիք են վենչուրային հիմնադրամները և հրեշտակ ներդրողները: Երրորդ և ամենակա-

ընդորը՝ ազդում է երկրի աշխատուժի շուկայի վրա՝ ստեղծելով նոր աշխատատեղեր: Սա ակնհայտ է հատկապես փոքր երկրներում, որտեղ միաեղջյուր ստարտափների թիվը, մեկ շնչի հաշվով, բավականին մեծ է: Միաեղջյուրներն օգնում են փոքր երկրների ստարտափ էկոհամակարգերի զարգացմանը և ավելի շատ ներդրումներ ներգրավում՝ տեղական ներդրումային շուկան ավելի կայուն դարձնելով վաղ փուլում գտնվող ստարտափների համար, իսկ էկոհամակարգն ավելի հայտնի դարձնելով օտարերկրյա ներդրողների շրջանում՝ ապահովում են դրանց հասանելիությունը համեմատաբար ուշ փուլում գտնվող ստարտափների համար:

ВАГЕ ТУМАНЯН

Аспирант кафедры управления Академии
государственного управления Республики Армения

Роль стартапов-единорогов в развитии стартап-экосистемы страны. – Единороги играют жизненно важную роль в развитии стартап-экосистемы страны. Во-первых, после того, как стартап в стране создает свой первый стартап-единорог по разработке программного обеспечения, он набирает популярность в СМИ, поскольку его освещают всемирно известные издатели. Тогда он становится более привлекательным как для местных, так и для иностранных инвесторов, таких как фонды венчурного капитала и бизнес-ангелы. В-третьих, что наиболее важно, это влияет на рынок рабочей силы страны, создавая новые рабочие места. Это особенно заметно в небольших странах, где количество стартапов-единорогов на душу населения достаточно велико. Единороги помогают развивать стартап-экосистемы этих малых стран и привлекать больше инвестиций, делая местный инвестиционный рынок более устойчивым для стартапов на ранних стадиях, а экосистему – более известной среди иностранных инвесторов, обеспечивая к ним легкий доступ для стартапов, находящихся на относительно поздней стадии развития.