

**ST//RTUP  
P//LAND**

POLISH  
**STARTUPS**  
2023



# STARTUP POLAND

## POLISH STARTUPS 2023

Startup Poland, Warsaw 2023

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Startup Poland Foundation, Warsaw 2023

ISBN: 978-83-968029-2-7

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**Publication available  
free of charge at:**

[www.startuppoland.org](http://www.startuppoland.org)

### Partners

Google for Startups

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Food

Co-funded by the  
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# Introduction

Poland is considered to be in the group of developed countries that have benefited from European Union membership for almost 20 years. However, there is still a considerable distance between us and the leading European economies. Obviously, shortening this distance is not easy or certain. In this process, we should not forget about the need to support our own potential, which will allow us to maintain a certain independence from unpredictable external factors. Now, this is even more important as supply chains have broken down since the COVID-19 pandemic. The full-scale war unleashed in Ukraine by Russia also caused a major mental shift, when it became obvious that the traditional economy based on raw material imports had to change. This made it clear to many hitherto advocates of maximum globalisation that independence, giving economic resilience, is essential in crisis situations. One element of this resilience must be a sector of new technologies that supports an innovative economy. As a country, we cannot be condemned solely to importing technological expertise.

There are countries with theoretically much less potential, whether due to geopolitical, demographic or historical circumstances, which have nevertheless managed to make enormous progress. One example of this is little Estonia whose entire population is smaller than that of Warsaw. The Estonians, however, had a great plan and carried it out with amazing results after only a few years. They focused on implementing new technologies and fostering innovation. It is not without reason that global brands such as Bolt and Skype were born there. This is a shining example of an economy trying to chase the best, and one not dissimilar to ours, needing innovation badly.

This is where the startup sector and the entire ecosystem around it has a role to play. However, it is such a specific market segment that it requires support in order to grow. Such support, primarily (but not exclusively) financial, must come both from the state – which has an interest in the development of technology companies – and from private investors. Unfortunately, for some time now, the mood in startups has not been as good as in previous years. The crisis, which affected the recently red-hot startup sector first in the United States and later also in the rest of the world, is now also leaving its mark on our domestic startup market.

As the Startup Poland Foundation, we are one of the voices of the startup community in Poland and we want to speak out about the needs of young technology companies. That is why we decided to check the current condition of Polish startups for the ninth time. In the survey carried out for this report, we look at the factors that can have a positive impact on their success as well as various types of maladies and barriers hindering their rapid development. On this occasion, while diagnosing the profile of Polish startups as well as the founders themselves, we took a closer look at several interesting, promising segments of this market. One of them is AI – according to many, we are currently on the threshold of a revolution related to the use of artificial intelligence. At the moment, it is still difficult to say where this revolution will take us, but one thing is certain – startups will have a part to play in it. We also take a closer look at three industries that are not only economically, but also socially important – foodtech, cleantech and medtech – and try to describe their current situation and future prospects.

We have also devoted a lot of attention to HR topics. We check how startups build their team, how they take care of the wellbeing of their employees, what they do to attract the best and improve competences, increasing their productivity. In our opinion, this is a key factor these days, when competition for experts is fierce – and this is true both for large companies and corporations and between startups themselves.

In this year's report, we also try to define the barriers and problems, mentioned in the survey, in relation to changing legislation and tax solutions. The results show that the instability of the law, unclear and sometimes contradictory regulations or still too much bureaucracy are the ball and chain of Polish startups.

All the positive and negative information contained in this report is not only meant to point out problems and complain about the existing reality. Above all, this report is intended to be a contribution to a broader discussion and, as a result, to joint action by all parties involved in supporting the country's startup market. This report may also be useful reading for potential investors, whether industry or venture capital.

Enjoy your reading.

**Tomasz Snażyk**  
CEO  
Startup Poland



# TOP 10

**1** AI is the keyword most frequently mentioned by Polish startups and best reflects the nature of their core product or service - one in every three surveyed startups (33 per cent) considers AI, deeptech and IoT (Internet of Things) as keywords.

**2** The majority of startup employees are men. However, there is also a small group of companies where women predominate. 8 percent of the surveyed companies declare that women account for between 76 and 100 percent of their employees. 14 percent state that 51 to 75 percent of their employees are women. The largest percentage of women can be seen in cyber security startups. As many as 75 percent of the sector's players have teams that are made up of at least 50 percent women.. The second most feminized industry turns out to be fintech/insurtech (46 percent of startups operating in this market segment declare that more than half of their team are women).

**3** The country's most active regions in terms of the number of startups were: Mazovia (50 percent) and Lower Silesia (46 percent). The top five in this ranking now also includes the provinces of Lesser Poland, Greater Poland, as well as, Pomerania, and Łódź (ex aequo).

**4** The revenue situation of startups is currently better than a year ago. More than half (51 per cent) of startups are generating significantly more revenue than last year and 26 per cent are generating revenue slightly better than last year. For 8 per cent, the revenue situation is the same as in 2022.

**5** When it comes to external funding for startups, domestic VC funds are the most commonly mentioned, with 25 per cent of those surveyed benefiting from their support. From the foreign VC market, funding was received by 8 per cent of them. Next in line, startups point to business angels - also more often domestic ones (24 per cent) than foreign ones (7 per cent).

**6** The main sources of knowledge about legal changes for startups are industry portals, with content published there reaching 65 per cent of the respondents. Articles from the press and TV programmes are a source of information about changes in the law for 37 per cent of the respondents and social media for 47 per cent. One in every three startups (34 per cent) obtains their information directly from official EU websites, while one in every five visits the website of the Startup Poland Foundation (20 per cent) to monitor changes in the law pertaining to them.

**7** Negative opinions on legal changes prevail among the respondents. For 42 per cent of the startups, legal changes are sometimes a problem, as they often do not know how to interpret them correctly, and an almost identical percentage (41 per cent) do not know which changes affect them. Almost a third of them (31 per cent) declare that there are too many changes for them to keep up and stay up to date with.

**8** The key barrier to the development of startups is the cost of hiring an employee, which was mentioned by the highest number of respondents (54 per cent). The second most frequently mentioned barrier, brought up by almost every second startup (49 per cent), is the problem of acquiring funding in subsequent phases of development. As in previous years, there are also complaints about too much bureaucracy in running operations - this is a problem for 37 per cent of the respondents. In addition, 4 per cent point to the startup process being too long and expensive in their view, which is also to some extent linked to excessive bureaucracy.

**9** Among the areas that startups believe require support, funding issues come to the forefront. As many as 69 per cent of those asked would expect support in the area of finding funding sources and almost half (48 per cent) in the area of cooperation with investors. Assistance in company management would be useful for 31 per cent of the startups and in team management for 23 per cent. Support in adapting to required legal changes would be sought by 28 per cent of the respondents. Cyber security issues require support according to 18 per cent of those asked.

**10** What do founders complain about most when it comes to investor behaviour? Most often, startups complain about the simple lack of feedback after a meeting with an investor. This answer is mentioned by almost one in two startups (45 per cent). An almost identical percentage of the respondents (44 per cent) criticise the fact that investors take advantage of the founder's ignorance. The lack of equality between the two partners can lead to abuse and the startup founder usually has a much weaker bargaining position here. To some extent, this is linked to another problem mentioned in the survey - 42 per cent of the startups are most offended by investor's overly aggressive policy regarding the terms of cooperation.

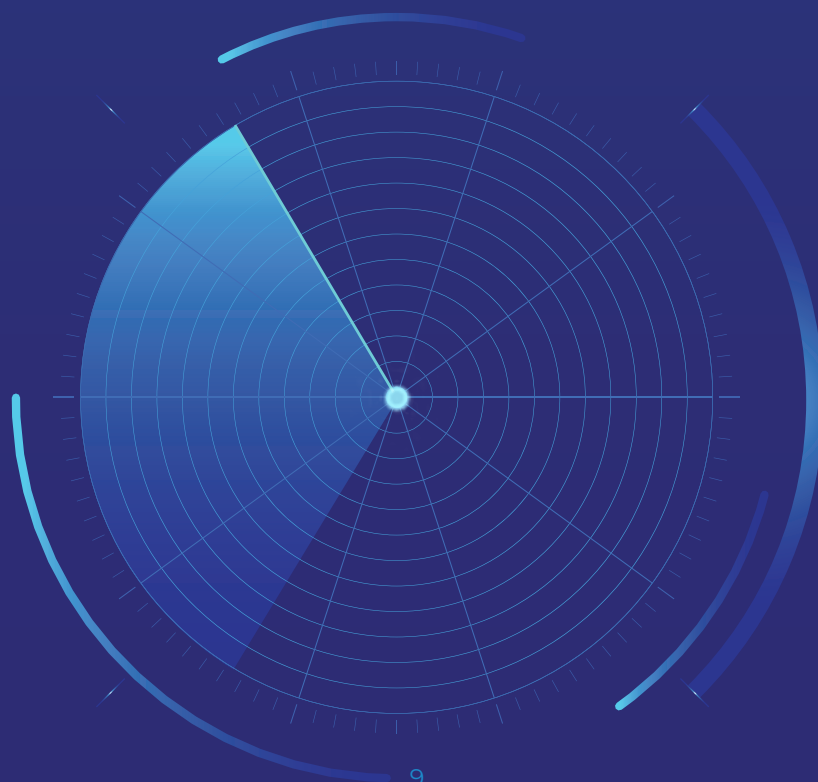






#01

# The profile of a Polish startup



# #01

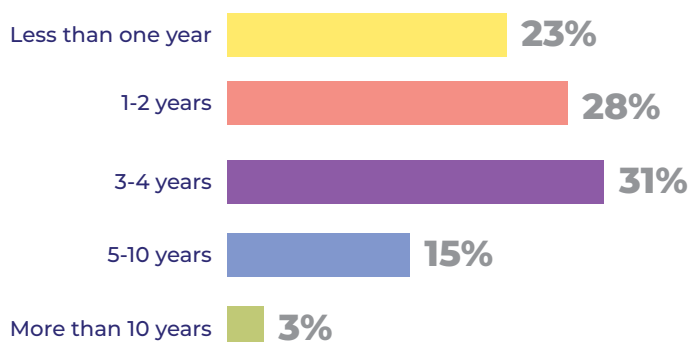
## The profile of a Polish startup

### 1.1. Length of activity

The Polish startup market is largely made up of companies that are very young. This seems obvious. There are many definitions of a startup, but virtually all of them mention a short period of operation, the pursuit of rapid growth and... a high risk of failure. Most market analyses confirm this picture. According to calculations by the American website Failory, as many as 9 out of 10 startups fail, of which 20 per cent go out of business within one year and another 50 per cent do not survive more than five years<sup>1</sup>. Among the most commonly mentioned reasons for closing their business, startups indicate: lack of funding, lack of market demand for their product or service and actions of competitors. With this broader background and the specifics of this market segment in mind, it is worth looking at the structure of participants in this year's survey conducted by the Startup Poland Foundation.

Among the respondents, almost one in four have been in business for less than a year, a slightly higher percentage (28 per cent) between and two years, and the highest percentage between three and four years. Those operating for a longer period of time – more than five years – account for 15 per cent. How long the business has been in operation was of key importance for the sampling of the entire survey. Companies operating for more than 10 years, according to the definition of a startup quoted earlier, were unable to participate in our survey. As a result, we obtained a fully representative cross-section of the Polish startup community, reflecting their current situation, needs and concerns.

### How long has your startup been operating?



## 1.2 The map of Polish startups. Which region of Poland is leading the way?

The map of Polish startups, apart from very minor fluctuations in recent years, remains unchanged. It is the Lower Silesian region that wins the title of 'Polish Silicon Valley', ex aequo with the Masovian region, i.e. primarily Warsaw. The capital city's high position comes as no surprise as the capital city of every country attracts business and not only large-scale business. But what is the strength of Lower Silesia which is at the top of all rankings every year in terms of the number of startups both established and operating locally? This region has always been economically strong compared to others. These include historical factors, among others. Additionally, Lower Silesia has a thriving academic and scientific community and there is better infrastructure than in many other parts of the country. These factors are pillars of the development of entrepreneurship as such. Added to this is the favourable geographical location – especially the proximity to the German border. Many Lower Silesian companies have the opportunity to become part of the chain of subcontractors for German industry and this in turn stimulates further development and, in a way, can be an impulse for the creation of innovations and the development of technologies by local startups.

In this year's survey by the Startup Poland Foundation, however, we decided to check not only where the most startups are created, but also in which regions they actually operate. In the former case, the predominance of the Lower Silesian Voivodeship (28 per cent of responses) and the Masovian Voivodeship (19 per cent) is clearer – it is there where most young companies are created. The Lesser Poland Voivodeship is also on the podium, but here this percentage is significantly lower (12%).



# The best moment was yesterday...

A cease and desist call is not the kind of letter you want to receive as a seriously successful first startup. As it happens, that's exactly the letter I received... It's the beginning of a story that I tell today, many years later, with amusement. Even with a hint of pride because of how the whole thing turned out. At the time, years ago, I was not laughing, I even cracked up like the NFT market.

Instead, my partner was a a haven of reason: "Relax, there's a long way to go before the trial, you have to write back to them that we don't agree with them". This suggested experience. My partner, Marek, had already had several years of adventures as an entrepreneur, including legal skirmishes. He had been developing his passions and involved in numerous projects and ideas for a long time. And even though I thought I had plenty of design experience, this is where I fell down.

I knew the urban legends that 9 out of 10 startups fail; or, for example, the data from CB Insights that 70% of startups that get funding fail. What is it really like? There are rare cases that turn out just like that. Sometimes the first company lasts, but the scope of its activities changes several times. There are also many situations where projects die in silence.

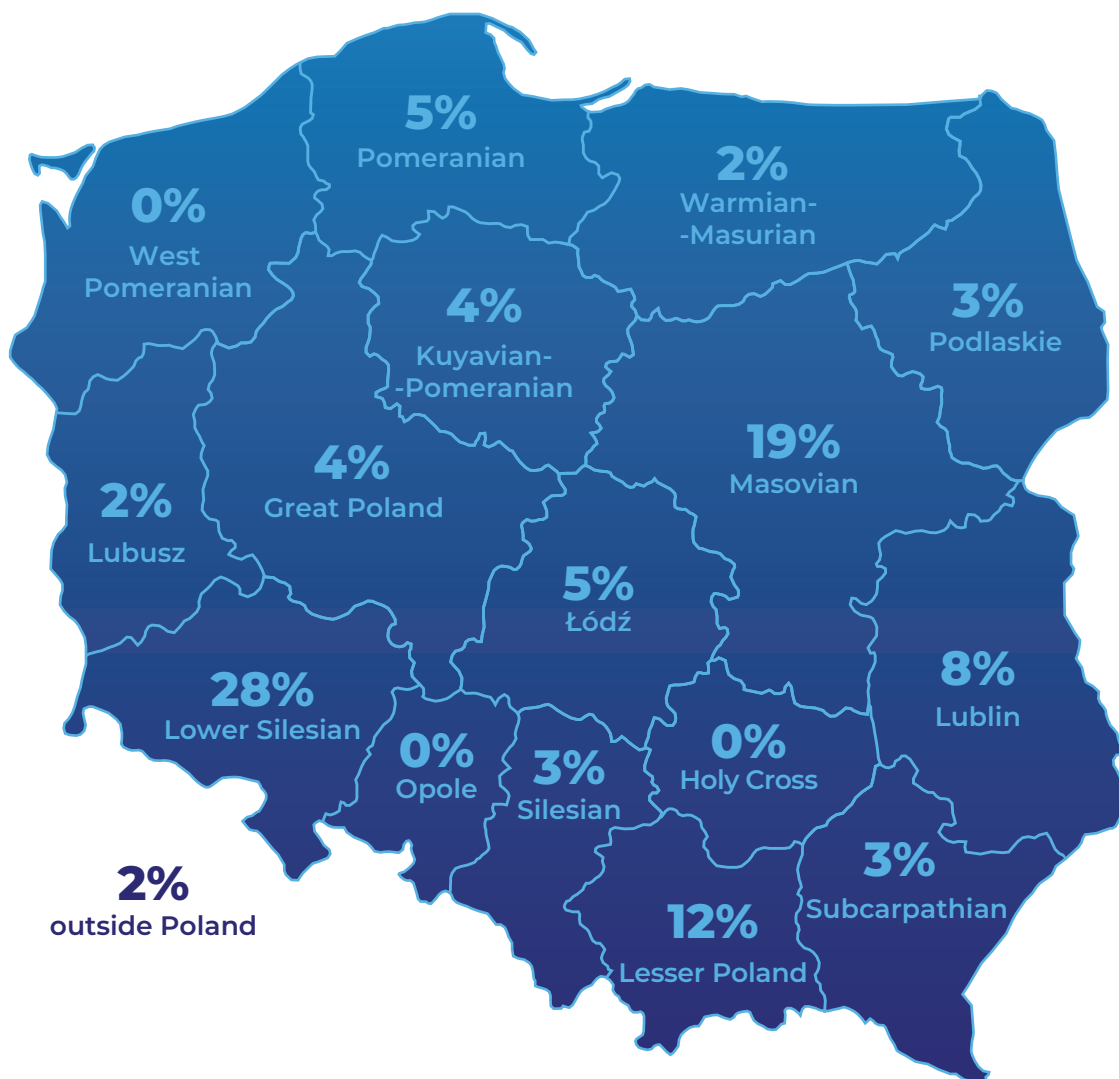
This silence derails the whole elaborate plan to become a millionaire... Therefore, it is worth remembering that you are much more likely to become a millionaire by working in a corporation. After a few years, you invest a lavish salary and live comfortably. If you're opening a startup just for the cash, that's the easier route. If, on the other hand, you are looking for growth and adventure at the same time – start a company. If you want to raise the bar even further, then create a startup! The experience and confidence you'll gain won't compare to anything else. Perhaps this adventure will lead you to the CEO's office of a big company for discussions about the possibility of taking over your company, as happened to me. Because that's how my pre-call case ended.

Therefore, remember, the full title of this text should read: The best time to start was yesterday and the second best is today. If you're good at something, don't let yourself be told that it's too late or too early to start a business. Act... and have a good partner!

**Konrad Latkowski**  
President and Co-Founder of  
RIFFSEC

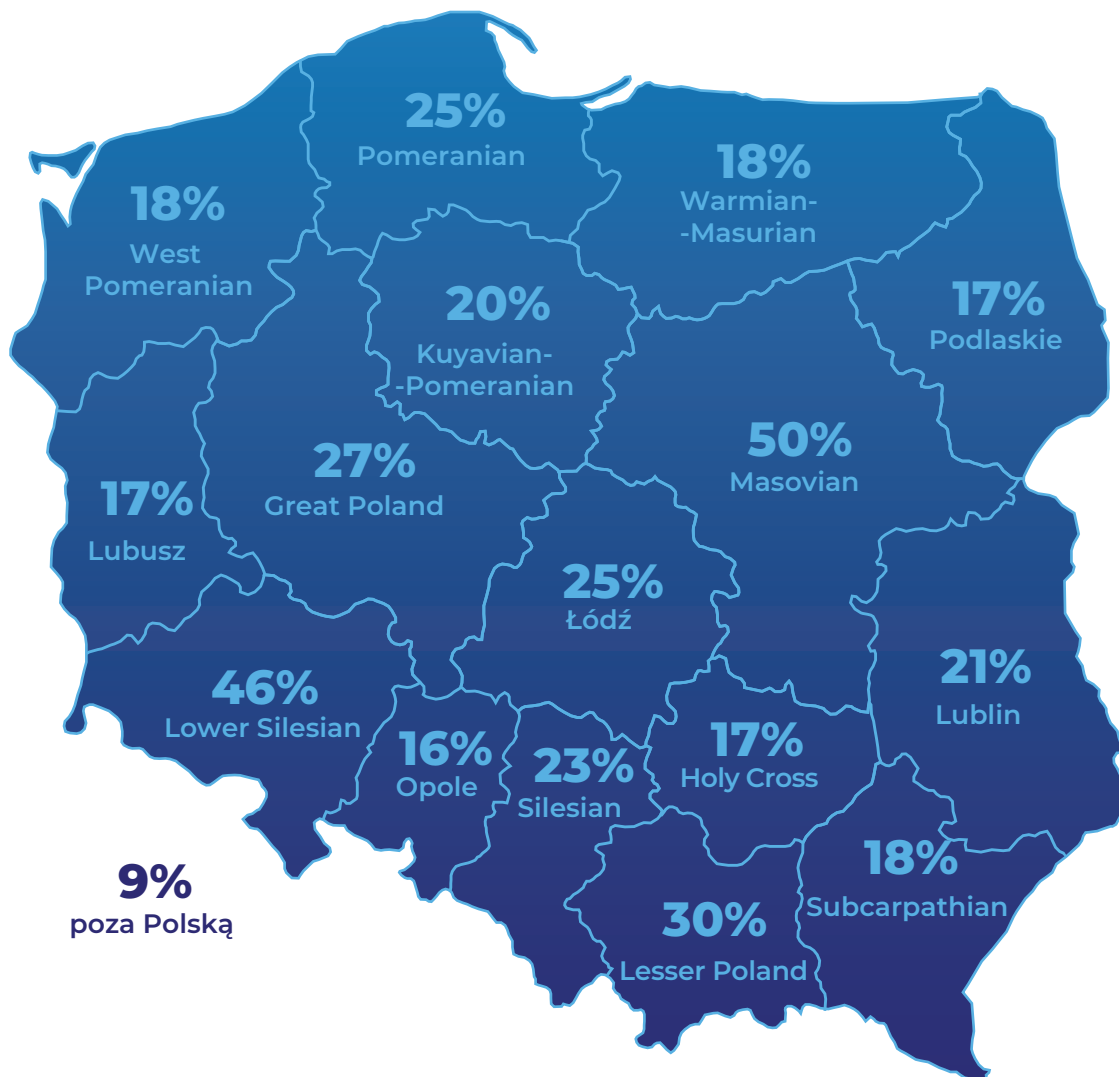


In which voivodeship is your startup registered?



In contrast, the question about where the startup actually operates, rather than where it was created, shows a slightly different distribution on the map. In this case, the geographical distribution is more even, which is due, among other things, to the fact that the respondents could select more than one answer if their company operates simultaneously in multiple regions of the country or in its entire territory. Again, however, the predominance of Masovia and Lower Silesia is very clear. The survey shows that every second Polish startup operates in the Masovian Voivodeship (50 per cent) and 46 per cent in the Lower Silesian Voivodeship. The Lesser Poland Voivodeship also ranks third here (30 per cent of responses), but is closely followed by the Greater Poland Voivodeship (27 per cent), the Pomeranian Voivodeship and the Łódź Voivodeship (both 25 per cent). The Lublin Voivodeship and the Kuyavian-Pomeranian Voivodeship are also above the 20 per cent threshold. All other regions have a few percent of indications and 9 per cent of the surveyed startups also (or only) operate outside Poland.

In which voivodeship/s does your startup actually operate?



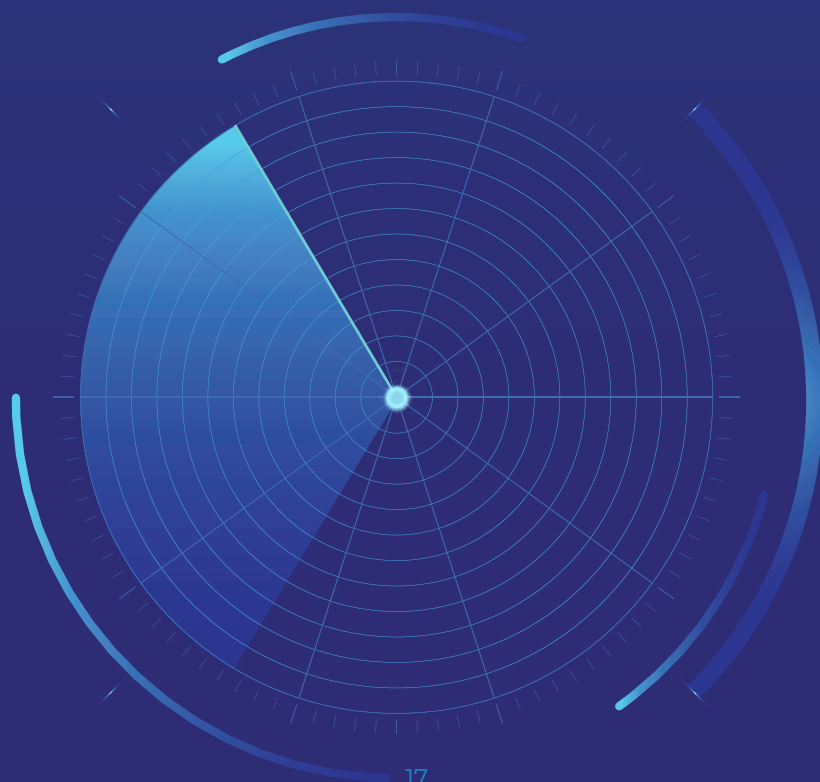
What are the weakest regions in the country in terms of startups? As in previous years, they are primarily the smallest voivodeships - the Lubusze Voivodeship (2 per cent), the Holy Cross Voivodeship and the Opole Voivodeship (1 per cent each) as well as the West Pomeranian Voivodeship - where not a single startup participating in the survey was created. Thus, it is not the so-called eastern wall, but regions in the west of Poland that stand out on the negative side when it comes to startups.





#02

# What industries do Polish startups specialise in?



## #02

# What industries do Polish startups specialise in?

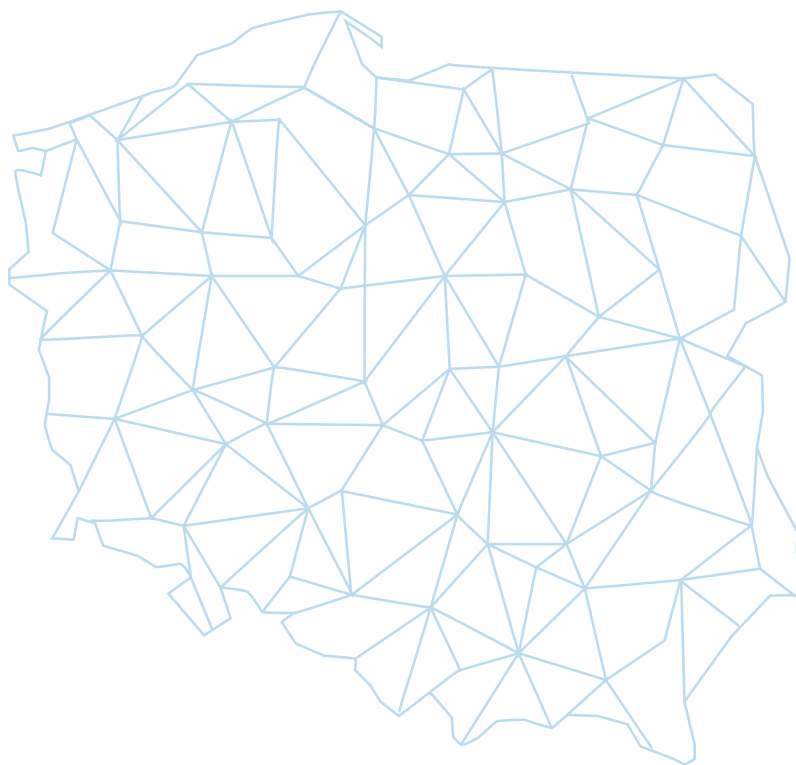
## 2.1 AI takes it all?

AI (Artificial Intelligence) has been abbreviated in various ways for many years now – after all, the algorithms of artificial intelligence are responsible for the functioning of many technologies, without which we can no longer imagine our daily lives. Starting with numerous smartphone applications, algorithms ‘sewn’ into social media, chatbots and voicebots serving hotlines and customer service offices, GPS navigation and many others - all of these function thanks to AI. Recently, however, there was an event that many hailed as a true technological game changer. Presented and made available to users by the American company OpenAI at the end of last year, ChatGPT was met with delight by some and dismay by others around the world. Numerous experts pointed out that this type of tool is so groundbreaking and changes the approach to technology so much that it could successfully replace many existing solutions from a variety of areas. Many experts have ambivalent feelings about it and the far-reaching effects of the ChatGPT launch are still difficult to predict at the moment. The debut of OpenAI's tool itself has provoked an acceleration of bigtech works on competing solutions.

As such, the Polish technology sector is not in a position to engage in an equal fight with the groundbreaking solutions offered by global giants such as OpenAI, Google and Microsoft. However, this does not mean that we do not have any arguments when it comes to developing tools based on advanced algorithms. Our strength is primarily in the world's highly regarded programmers, some of whom work in Polish startups or establish them themselves. Many companies are looking for experts that develop software based on machine learning and artificial intelligence algorithms. For the time being, this demand is most evident on the American market, but this trend will certainly reach us sooner or later.

The first Polish tools similar to ChatGPT are already appearing. Warsaw-based startup SentiOne, which deals with customer service automation in companies on a daily basis, boasts that it has created its own proprietary conversational AI technology<sup>2</sup>. So, will we have a multitude of such services offered by Polish startups? One has to be cautiously optimistic here, as this type of technology requires a huge amount of funding, which is unlikely to happen on our market.

The Startup Poland survey shows, however, that AI is the keyword most frequently indicated by Polish startups, best reflecting the nature of their main product or service. One in every three surveyed startups (33 per cent) considers AI, deeptech and IoT (internet of things) as keywords.





# Where does the success of deeptech startups come from?

In recent years, the startup scene has been dominated by three sectors: medicine, e-commerce and education, which combined account for 43% of the market. Nevertheless, subtle changes are noticeable. The e-commerce sector is losing ground, and a new wave of innovation is emerging in robotics, energy and sustainability. The year 2023 has seen interesting startups investment rounds in this area, including United Robots, Sunroof and Fresh Insert. This evolution of the market indicates a broadening of investment horizons and opens up prospects for venture capital funds, which are watching the development of these industries with interest.

According to the survey, in the face of sectoral transformations, companies are reaching for new technologies with increasing enthusiasm. Startups are becoming increasingly keen on building proprietary hardware, operate in the area of deeptech or take advantage of the opportunities offered by artificial intelligence. So far, the increase in interest in AI has been further compounded by the OpenAI revolution. In the first half of 2023, the share of investment in AI startups worldwide increased by an impressive 72% compared to 2022. Poland, with its rich pool of internationally renowned AI experts, is not lagging behind in this race. This is evidenced by the success of startups such as Eleven Labs and AI Clearing, which have attracted investments in excess of 10 million EUR, underlining the growing appetite of investors for innovative AI-based solutions from Poland.

Although often associated with artificial intelligence, deeptech encompasses more fields from different technological domains. From an investor's perspective, it is an industry where companies not only bear business risk (typical of startups), but also (mainly) technological risk. Numerous success stories increase investor interest. In 2023, we have seen inspiring teams obtain funding on the Polish startup scene. For example, the startup Contec has developed an innovative approach to recycling used tyres and Inuru is rediscovering the potential of OLED displays. Nor should we overlook the Thorium Space initiative, which is laying a solid foundation for future data transfer systems. These projects illustrate the spectrum of possibilities and Poland's significant contribution to the development of the global deeptech ecosystem.

The visible shift in the startup market is supported by the preference of investors who are eagerly engaging in pioneering technology projects. In 2021, only one-third of significant investment rounds in Polish startups focused on AI or deeptech, but the trend has changed – this year, investments in startups creating breakthrough solutions reached more than 120 million EUR, accounting for almost 70 per cent of the total investment pool. This trend indicates that investors, in addition to an experienced team of founders, a growing market and a solid product, are increasingly daring to bet on technological innovation, seeing it as a driver of future success.

Developing innovation in the realm of deeptech is a task that requires advanced expertise and solid technological backing. As an investor with experience in this area, I look for startups that not only create genuine value, but have the potential to revolutionise the market. It is crucial that the proposed solutions are unique and difficult to replicate, which should lead current market leaders to consider acquisitions rather than copying a solution – as has happened in fintech or e-commerce.

Poland is teeming with engineering talent. But the success of a startup is not just about R&D. Three pieces of advice for our experts: 1) Market value first – talk to potential customers and partners, especially from abroad. 2) Plan your project funding and establish relationships with investors who understand your product and will be supportive. 3) Build an adaptable interdisciplinary team – business competence is essential for successful commercialisation.

**Michał Lechowski**

Associate  
APER Ventures



## **2.2. Foodtech and cleantech – support for economic resilience and promotion of sustainable practices**

With each decade, humanity increases in size significantly. At the end of November 2022, the world's population exceeded 8 billion people. At the same time, climate change is causing available resources to shrink and agricultural production to face challenges such as droughts and floods in many regions of the world. These deteriorating conditions, coupled with a rapidly growing demand for cheap, readily available food, are increasing the scale of industrial food production, which in turn is exacerbating environmental problems. Indeed, mass production of highly processed foods is responsible for a significant proportion of greenhouse gas emissions into the atmosphere. In addition, such products are largely harmful to consumers, contributing to many diseases of civilisation, including diabetes, obesity and cancer. Of course, it is not likely that industrial food production will be stopped or significantly reduced in the forthcoming years. However, this does not mean that there are no good alternatives.

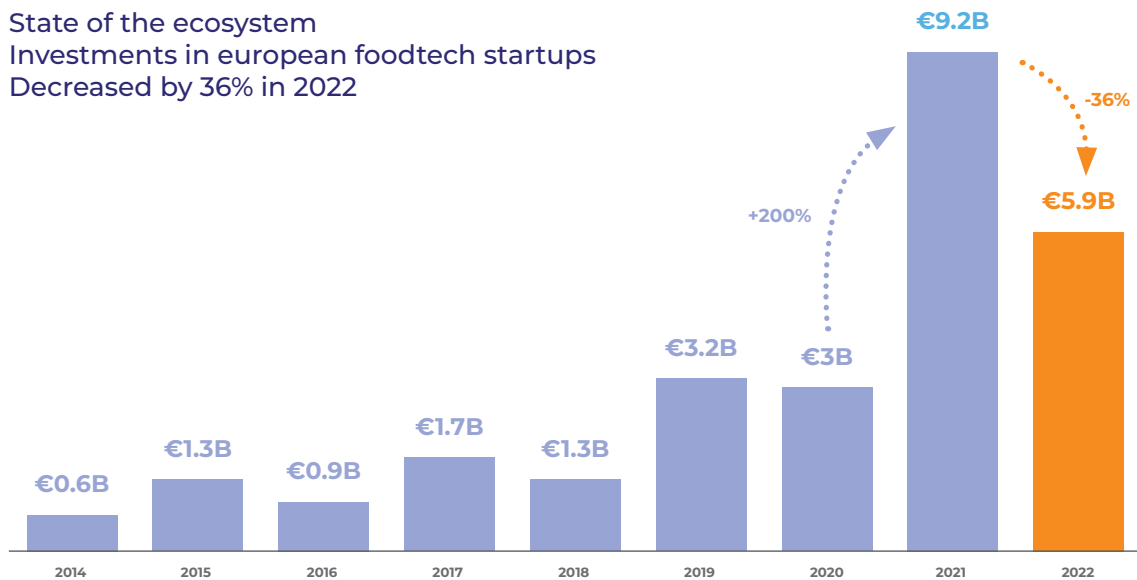
Increasing the scale of production by farms is not always possible. A necessary change to the current farming model should therefore be the implementation of new, already available technologies in agriculture. The so-called agriculture 4.0, reaching for innovative, effective solutions, has a chance to change this negative scenario outlined in the previous paragraph. It is worth remembering that whether and which innovations we introduce may be of almost civilisational significance. This also applies to our domestic agrifood market. The fact that Polish farmers will also not be spared from the problems resulting from climate change is already virtually certain. According to IMGW experts, the so-called agricultural drought in Poland has already become a long-term phenomenon – it has been accompanying us with short breaks since 2014. Thus, modern agriculture should be a priority – after all, preserving and developing domestic agricultural production as a strategic sector is crucial, especially now when we should be building the resilience of our economy in response to significant turbulence, whether global or local.

Funding for innovation in agrifood businesses is provided through EU and national funds. Startups are also responding to the need to implement new technologies in the agricultural sector. Young companies from the so-called agritech sector, or the more broadly understood foodtech segment, have the opportunity to contribute to this agro-technological revolution. However, they require strong support from the state and EU programmes designed for them. One of the primary sources of funding for this sector is the Smart Growth Operational Programme, operated by the National Centre for Research and Development. However, capital support provided by private investors is also important.

Unfortunately, the growth figures for the foodtech industry have been heavily distorted by the COVID-19 pandemic. This can be seen in the charts below – as the foodtech category also includes food delivery solutions, there was a surge in investment here during the pandemic period, and thus the entire foodtech category saw record

numbers. With the end of the pandemic in 2022, however, investor interest has waned sharply and this is dragging the entire category down, even though its individual components continued to grow in some cases.

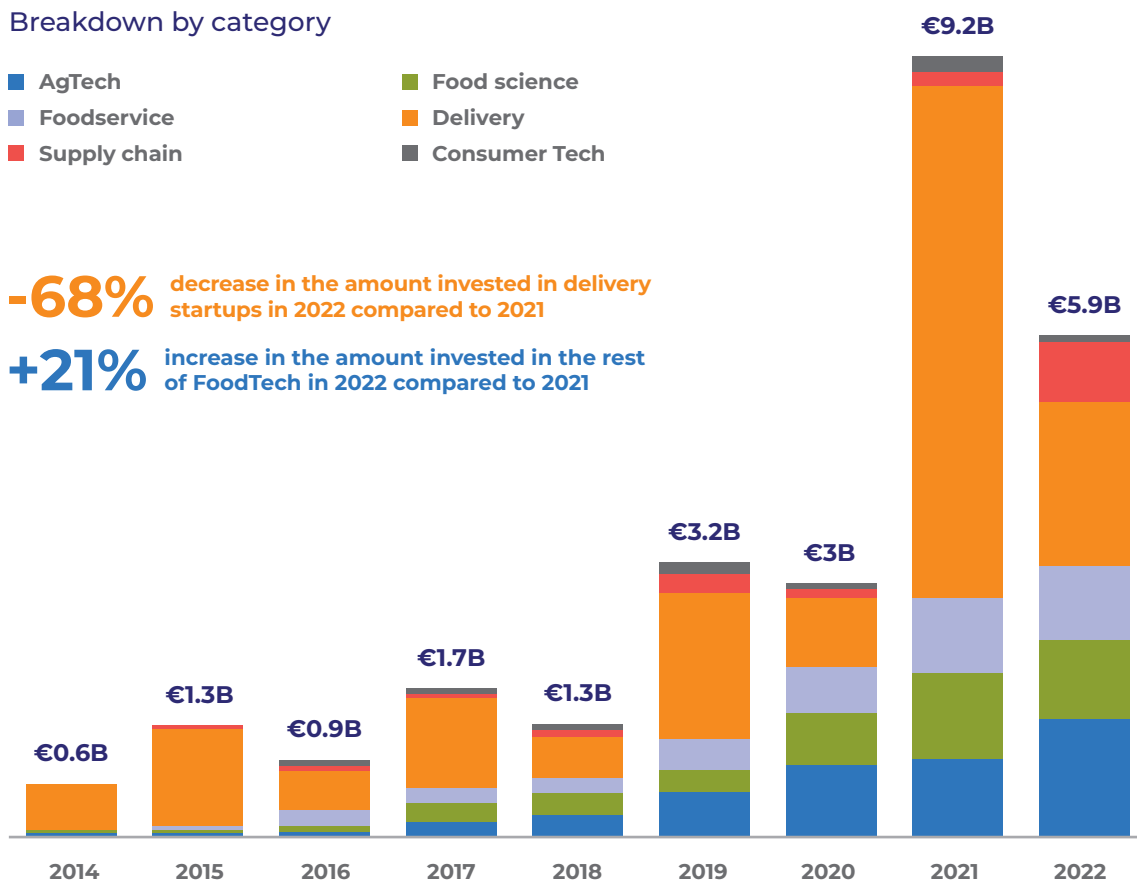
**State of the ecosystem**  
**Investments in european foodtech startups**  
**Decreased by 36% in 2022**



Source: DigitalFoodLab

**Breakdown by category**

- AgTech
- Foodservice
- Supply chain
- Food science
- Delivery
- Consumer Tech



**-68%** decrease in the amount invested in delivery startups in 2022 compared to 2021

**+21%** increase in the amount invested in the rest of FoodTech in 2022 compared to 2021

Source: DigitalFoodLab



According to data collected by Dealroom, 2022 was still a pretty good year for Polish foodtech. Drivers for further growth in this market segment include the growing trend for vegan meat substitutes and the fight against food waste. However, many experts point out that it is 2023 that will be the key year for Polish foodtech – less favourable sentiment from global investors may also translate into declines in this sector.

The Startup Poland Foundation's surveys conducted in subsequent years have been showing increases so far. In 2021 and 2022, 3 per cent of the surveyed startups described their business profile as agritech and another 4 per cent as foodtech. In this year's latest survey, this percentage is even higher – 5 per cent of the entities indicated agritech and as many as 8 per cent foodtech. This trend is worth watching – if the number of startups operating in this area increases again in the next few years, the turbulence and negative trends are likely to pass our home market by. This, however, largely depends on an increase in national funding for research and development of technologies in this area, followed by their effective implementation.

This is also important because food production should be treated as a strategic sector for the state. The skilful use of technology in agriculture and the food industry is part of Poland's broadly understood economic resilience, while at the same time promoting a sustainable economy. Statements by representatives of the Polish Development Fund show that decision-makers are aware of this – startups such as Proterinrise (e.g. pea and broad bean protein concentrates), HiProMine (proteins for the production of animal feed from meat waste), Foodsy (purchasing unsold meals from restaurants, bars, cafes at a lower price) and Miesna Paczka are just some of the startups mentioned by PFR Ventures as interesting domestic companies worthy of investor interest.



# Innovations for the food of the future

In 2050, there will be 10 billion of us in the world. We will need more food produced in a more environmentally friendly way than has been the case so far. Today's food production contributes almost a third of greenhouse gas emissions.

In the past, the so-called 'green revolution' increased productivity. Today, we know that we need another wave of innovation in the food production sector to produce efficiently, but for the long-term benefit of the planet and people, including future generations.

Solutions are also being sought to prevent and support the treatment of so-called diseases of civilisation. There is an increasing demand for offerings for people who care about diet as part of a healthy and sporty lifestyle.

Finally, the pandemic and the war in Ukraine have indicated that food security is a top priority and today's complex chains require new solutions, related to transparency and food quality assurance.

For greater environmental responsibility, efficiency, accessibility, quality, transparency and resilience of food production systems, innovation – new ideas and technologies; as well as refinement and scaling of existing innovative solutions – is and will be necessary.

Innovations based on digitalisation, AI, biotechnology, biochemistry, blockchain, health tech have taken hold in the agro-food sector, but will be increasingly sought after by farmers and agribusinesses, food producers, distributors, policy makers. This will translate into increasing interest from public and private investors in innovations from this sector.

As EIT food, supported by the European Institute of Innovation and Technology (EIT), a body of the European Union, we too invest in projects, organisations and individuals that share our goals for a healthy and sustainable food system. We also see that there are more and more startups and teams working on innovative foodtech solutions. More transfer of innovations from other fields is also needed. The agri-food market needs and will look for solutions from AI, blockchain, fintech, renewables, energy efficiency or medicine in the years to come.

These innovations require sufficient time, patience and expertise to validate them and bring them to the market, but they have huge potential in terms of both return on investment and environmental and social impact.

A circular portrait of Ewa Karólewska, a woman with dark hair, smiling. The portrait is framed by a blue and white circular graphic with tick marks, resembling a clock or a gauge.

### **Ewa Karólewska**

senior project manager on startup support  
European Institute of Innovation & Technology (EIT) Food

A circular portrait of Paweł Ciach, a man with a beard and short hair, smiling. The portrait is framed by a blue and white circular graphic with tick marks, resembling a clock or a gauge.

### **Paweł Ciach**

RIS project manager on business creation  
European Institute of Innovation & Technology (EIT) Food

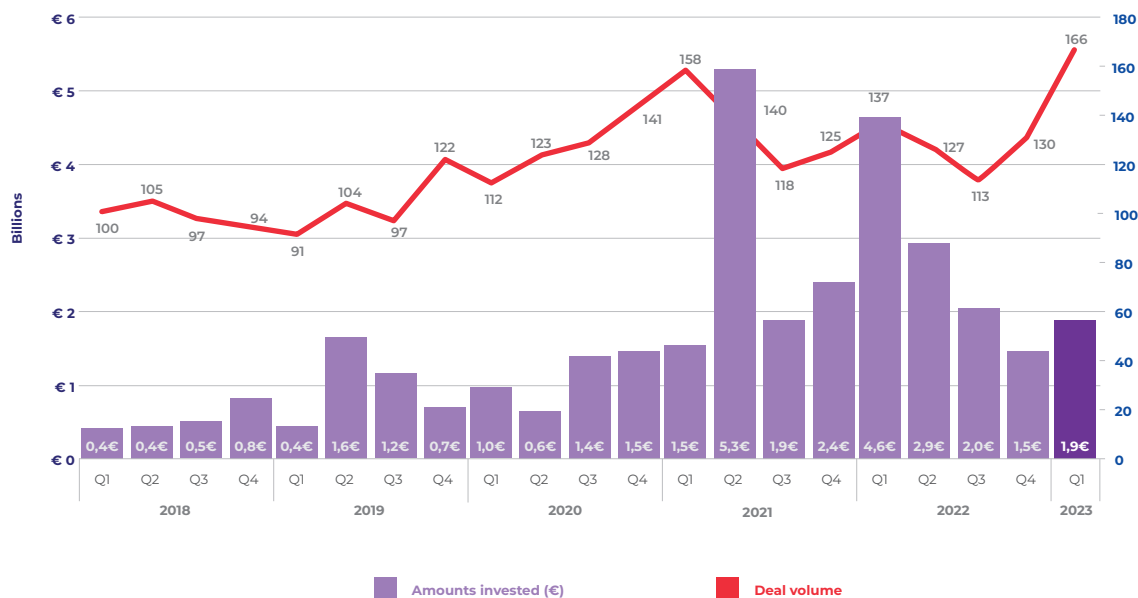
*EIT Food is the world's largest and most dynamic food community, supported by the European Institute of Innovation & Technology (EIT), an independent body of the European Union,*

Another increasingly important segment of the startup market is cleantech, i.e. companies dealing with renewable energy solutions and green transformation. Among the participants in the Startup Poland Foundation's survey, 7 per cent specifically pointed to cleantech/greentech as the terms that best reflected the nature of their business.

The Startup Poland Foundation's special report 'Technology for Energy', published in 2022, was dedicated to this very sector. We paid particular attention there to the ESG revolution, which must largely drive the development of technologies that reduce greenhouse gas emissions and support renewable energy. However, we also pointed out numerous problems limiting the progress of change – e.g. restrictions on the establishment of onshore wind power plants or unfavourable changes regarding the cost-effectiveness of photovoltaics. Unfortunately, this situation has not improved at all over the past year and this despite significant increases in energy costs, both for business and individual consumers. The systemic problems, which require quick strategic decisions, but also large financial outlays (no money from the Recovery and Resilience Facility, KPO), such as the outdated and inefficient grid infrastructure or the lack of efficient energy storage, have not been solved either and we do not see much activity from decision-makers on this issue. However, the introduction (under EU legislation) of a deposit system operated by producers of beverages in plastic bottles or cans could prove to be a real revolution. It is possible that Polish cleantechs will also become part of this system.

The cleantech segment can therefore find room for active expansion here and seek funding sources to implement this growth. Cleantech for Europe's data shows that VC investment in cleantech in Europe continues to grow on a quarterly basis, despite overall declines in the VC market<sup>3</sup>. However, the situation looks much worse in the US and Asia. For the time being, the first quarter of this year was a record quarter in Europe in terms of the number of transactions and their volume. This increase is primarily in later-stage (Series B) investments, recording a 29 per cent growth quarter-on-quarter, with volume increased by 35 per cent. Early-stage investments are up 22 per cent compared to the last quarter, while transaction volume is up 26 per cent. In the first three months of 2023, the level of investments in the European cleantech sector amounted to EUR 1.9 billion. On a year-on-year basis, however, we are already experiencing a significant decline in the value of investments (in Q1 2022, the value of investments amounted to EUR 4.6 billion).

## EU27 Cleantech, Seed, Series A, Series Band Growth investment, 2018 – Q1 2023



Source: Cleantech for Europe

The Polish cleantech sector, although developing all the time, is not among the world or even European leaders. It may be significant that the recognised Cleantech 100 list, showing the world's leading cleantechs, does not include a single Polish company. The opportunity that could have emerged from the changes triggered by the energy crisis caused by Russia's full-scale invasion of Ukraine was not fully exploited. Meanwhile, it was precisely these dramatic events that highlighted to everyone the importance of energy independence, also understood as increasing the share of renewable energy in the overall energy mix and gradually moving away from fossil fuels largely imported from abroad. Unfortunately, however, we do not see much acceleration in this regard in our country. Meanwhile, innovative solutions to the problems of the Polish energy sector are also emerging in our country. Their success also depends to a large extent on adequate legal changes and, what is perhaps more difficult, a change of mentality among both decision-makers and investors. This is quite a difficult sector to invest in, although most cleantech founders argue that changes are inevitable here and various types of green technologies will be successively implemented in Poland as well. The green revolution is already underway. Failure to keep up with global trends and requirements in this area will be increasingly costly for any national economy.

## 2.3. Is medtech actually doing well?

Startups operating in the broadly understood medical sector have a relatively good reputation among investors. It is certainly one of the sectors that can count on a broad funding stream. The reason for this seems obvious - medical care concerns everyone and the technologies supporting it have been making significant progress in recent years. The medical industry is keen to embrace innovative solutions offered by so-called medtechs. However, this is quite a large market segment created by companies operating in very diverse areas - from manufacturers of medical and diagnostic equipment, through innovative medical and pharmaceutical products, to telemedicine or applications for making medical appointments. Robotisation, artificial intelligence and innovative drug delivery techniques are playing an increasingly important role in medicine.

The medtech industry has clearly been growing in recent years and the COVID-19 pandemic has strongly accelerated this upward trend. Data available on the Statista platform shows that the entire medtech market is currently worth approx. USD 19.4 billion and is expected to grow up to USD 23.2 billion by 2028 (CAGR higher by 3.6 per cent)<sup>4</sup>. The outlook therefore seems quite good. Nevertheless, medtech on a global scale is slowing down in terms of capital inflows from investors.

Indeed, analyses provided by Pitchbook show that investor activity in this sector declined in the first quarter of this year, although a slight rebound was already recorded in the following quarter (Q2) and is expected to slowly increase, according to analysts. The authors of this report have also noted that there is a growing diversity of medical technology categories that gain funding. Solutions in the field of surgical robotics, cancer treatment or neurostimulation raised more than USD 100 million from VC investors during the analysed period. However, this does not change the fact that innovations in medicine are relatively costly and time-consuming, so the return on such investments is not quick.

Medtechs have to deal with a number of additional challenges - ranging from the complex and specific regulatory environment (often very different from country to country), including those concerning the protection of sensitive medical data, to the required clinical trials, to the difficulty of recruiting high-calibre professionals and the high level of competition in this field. Finally - as this is an industry that relies heavily on research and development - synergies with the scientific community and universities are also crucial. On the other hand, widening social disparities in terms of access to public healthcare may also result in a growing demand for innovative solutions offered by medtechs. And what is the situation in our country? In the survey conducted by the Startup Poland Foundation, a relatively large number – as many as 17 per cent – of the surveyed companies have indicated the term 'medtech' as the one that best describes their activities. This is more than in surveys conducted in previous years, when this percentage was 12 per cent.

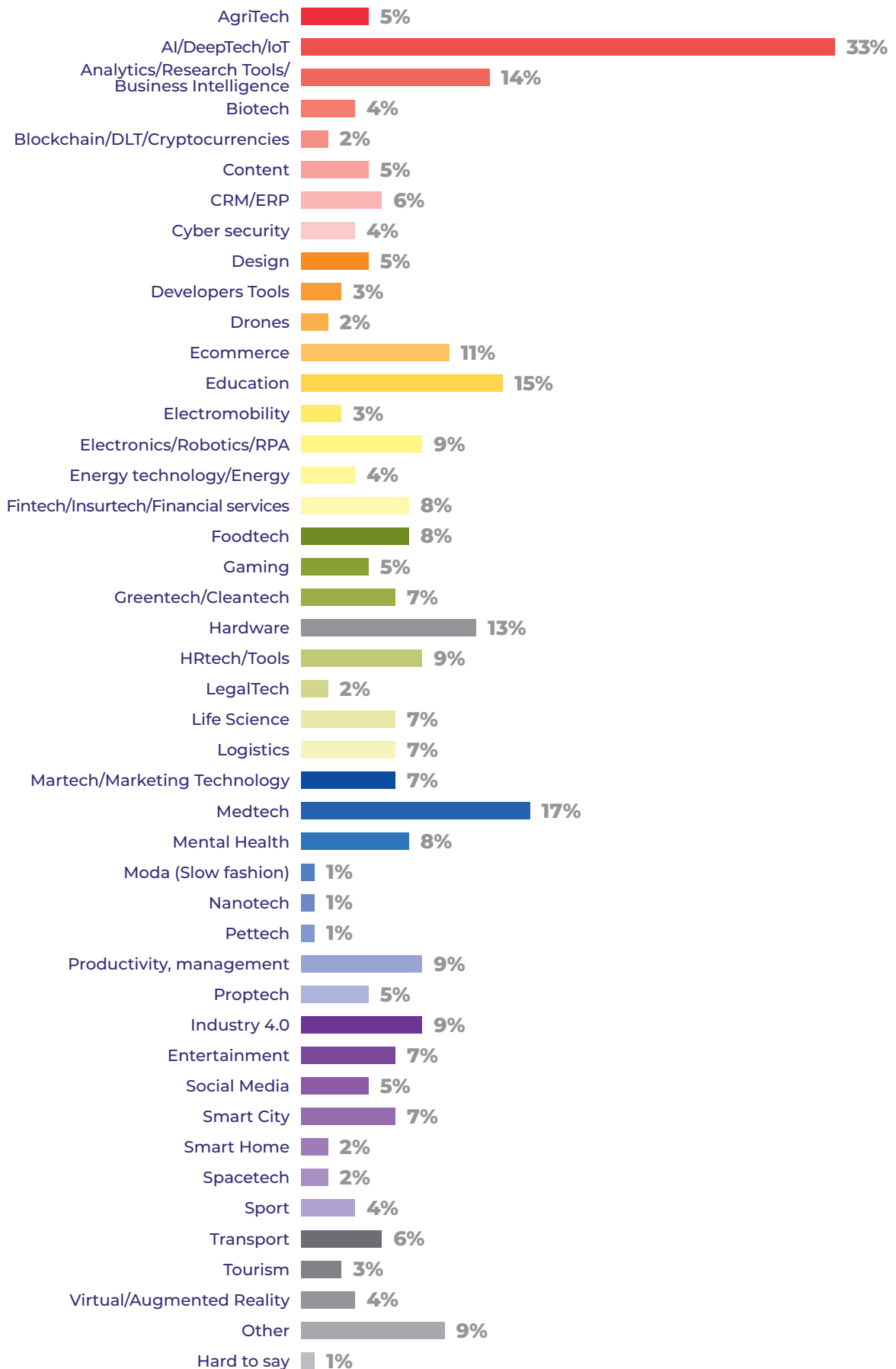
In the middle of this year, another edition of the report *Top Disruptors in Healthcare*<sup>5</sup> was published, analysing the situation in the Polish medtech sector in detail. As in previous editions, the biggest problem indicated by medical startups is the difficulty of finding investors and funding – this answer is given by as many as 44 per cent of the medtechs.

This report also included an analysis of the sources of funding for Polish medtechs. It turns out that the most common (56 per cent) are the founders' own funds (bootstrapping). Private investors were indicated by 41 per cent of the respondents and capital from European fund grants was indicated by 40 per cent. One in three medtechs participating in the survey obtained funding from Polish VC funds and 13 per cent from foreign funds.





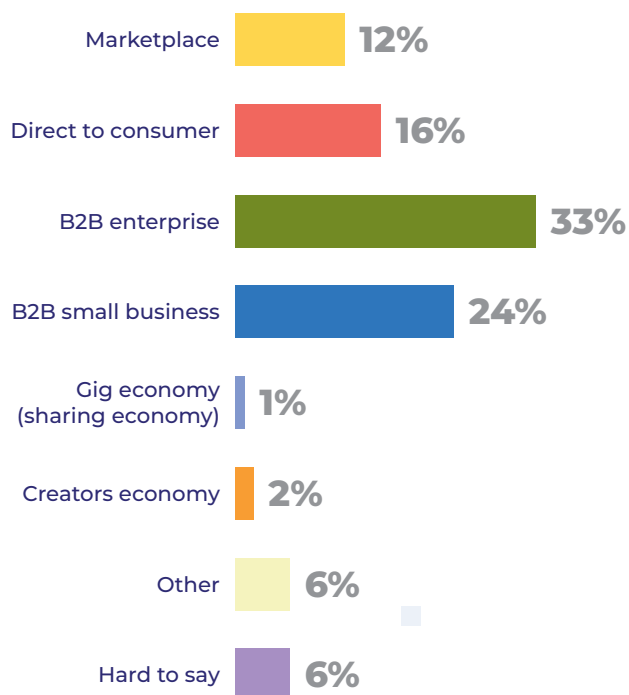
Pinpoint the keywords that best capture the nature of your main product/service



## 2.4. Business models preferred by startups

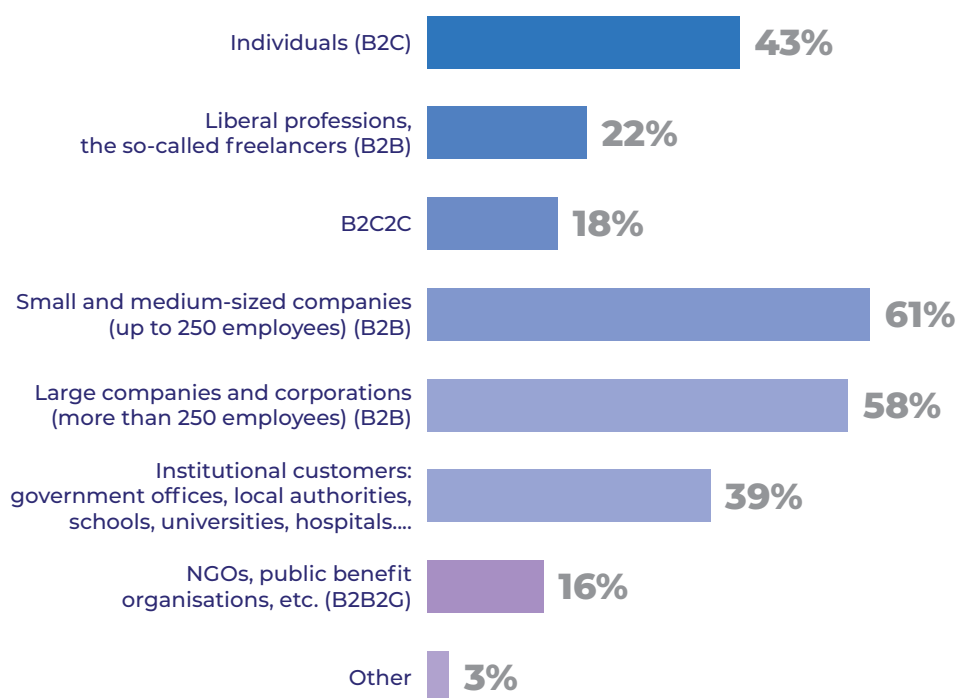
The Startup Poland Foundation's survey periodically examines in which business models young technology companies operate. The answers indicate that Polish startups are definitely more likely to direct their offer to companies - primarily large ones. This was the answer given by one in three surveyed entities (33 per cent). Another 24 per cent also point to the B2B model, but aimed at small companies. Only 16 per cent of startups indicated a business model aimed directly at the customer (B2C). Operating in a marketplace model is the domain of 12 per cent of those asked. Other models, but much less common, are the 'creator economy', i.e. operating in a model that supports influencer activity (2 per cent), and the 'gig economy', i.e. working from project to project (1 per cent). The structure of the Polish startup sector in terms of preferred business models has not changed much in recent years.

What business model does your startup operate under?



An additional question asked in the Startup Poland survey (it was possible to choose from several answers) concerned the types of customers who are the assumed target groups of the product or service offered by the startup. In this case, the difference between B2B and B2C is smaller, although still clear. The B2B model aimed at small and medium-sized companies (fewer than 250 employees) is the most common and the model aimed at large companies and corporations was indicated slightly less frequently (58 per cent). A further 22 per cent of indications were for activities aimed at freelance professionals, which also fall under the B2B model. For 39 per cent of those asked, the target recipients are institutional clients: offices, hospitals, local authorities, schools, universities, etc.

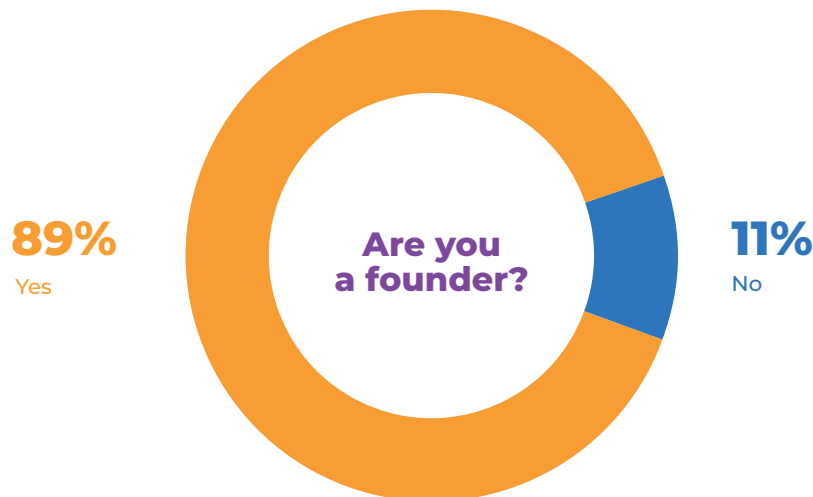
### What types of customers are the assumed target groups for your startup's product/service? You can select several answers



Business-to-consumer (B2C) offers were mentioned by 43 per cent of the respondents and B2C2C activities by 18 per cent. This is a model in which a company can sell one product to a consumer who can in turn sell or make the same product available to other consumers without the company's involvement. The offer to NGOs and non-profit organisations (B2B2G) was indicated by 16 per cent of the startups.

## 2.5. Founder's profile – determined businessman or caring team leader?

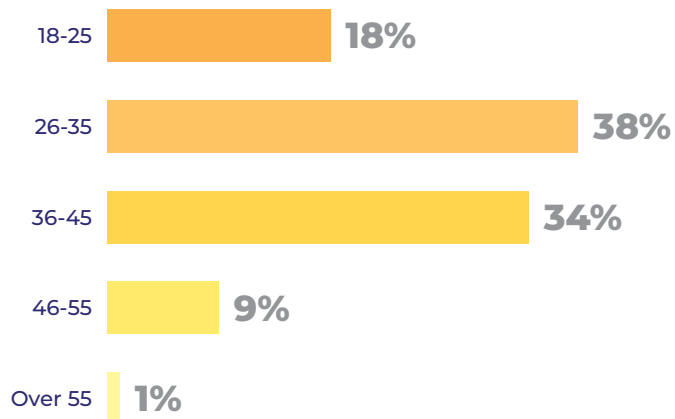
In this year's survey, we again looked at the profiles of the founders of Polish startups themselves, who made up the vast majority of the entire sample (almost 90 per cent). This allowed us to thoroughly analyse their profile, professional experience and education.



The results of our survey show that the thought of founding a startup is more often associated with slightly older and even middle-aged people rather than with the youngest age groups. This may come as a surprise, as a startup is commonly associated with a very young environment, rather at the opposite end of the traditionally understood business, where CEOs or management board members are usually people over 40. Meanwhile, it turns out that the age of startup founders is not so far from the market average.

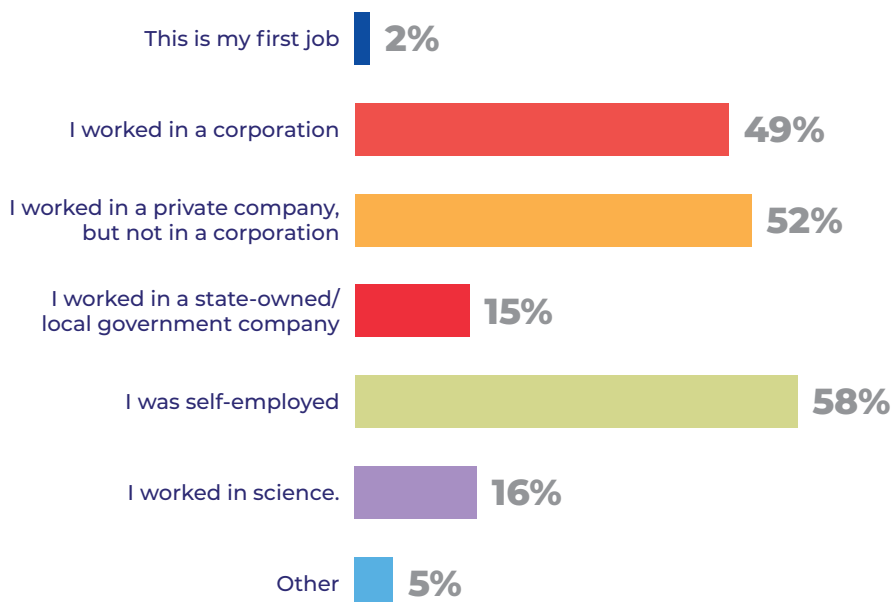
The largest number, i.e. 38 per cent of the founders, founded their startup between the ages of 26 and 35, with the next largest group being founders aged 36-45. The younger generation (18-25) only accounts for 18 per cent of the survey participants. Founders from the 46-55 year-old generation are even less numerous, accounting for 9 per cent of those questioned. The oldest generation, over 55 years of age, is basically marginal – only 1 per cent of the founders founded their startup at this age. It is more likely that people who have had other work experience before are choosing to create a startup, which is certainly important when starting out.

### How old were you when you founded the startup you are currently running?



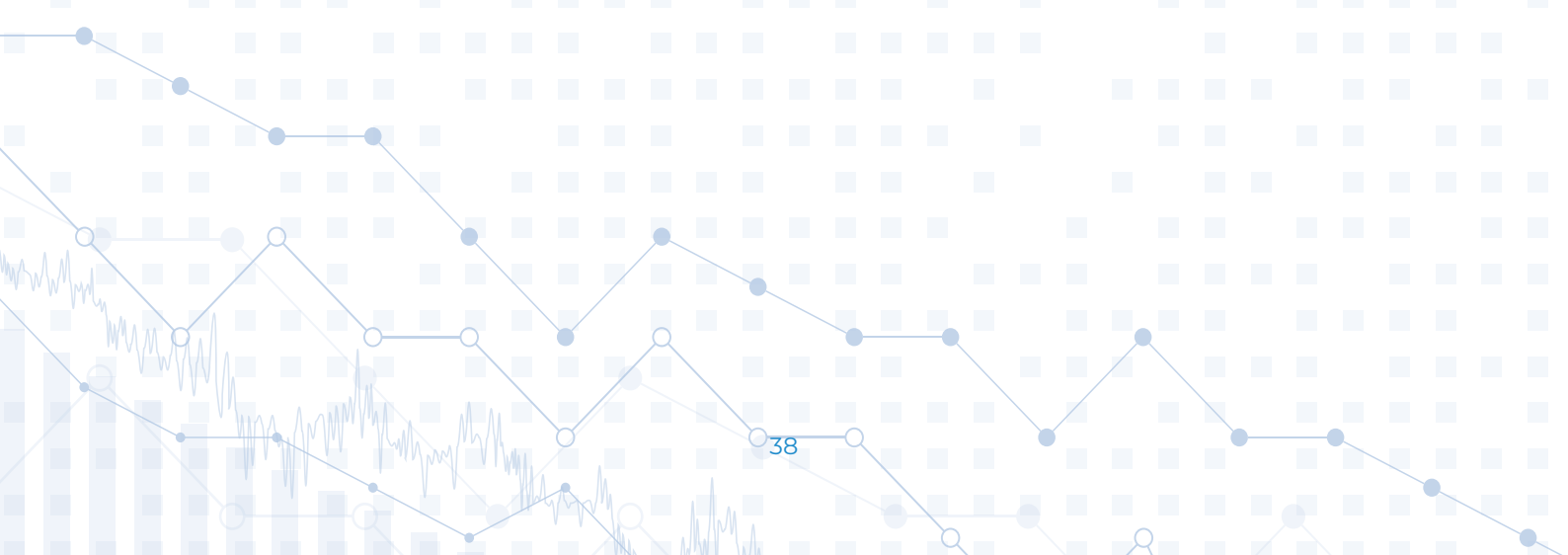
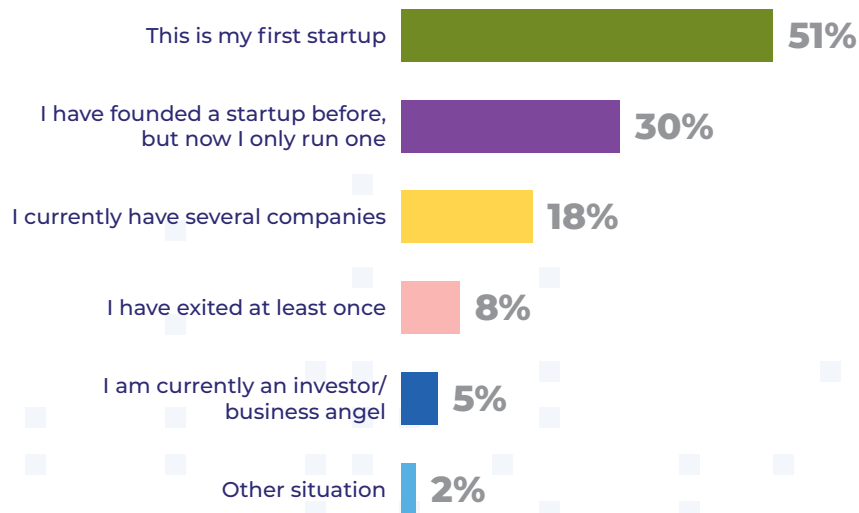
The age of the founders does not necessarily relate directly to their previous experience, although for only 2 per cent this is their first professional job. Founders are most often people who have had the opportunity to run their own business before (58 per cent). Slightly fewer (52 per cent) have previously worked in a smaller private company and another 49 per cent in a corporation. A fairly sizable group of founders are former academics (16 per cent). Experience of working for a state-owned company or local government is declared by 15 per cent of those asked.

### What is your previous work experience?



For more than half of the respondents (51 per cent), the startup they are currently running is the first one they have founded. The vast majority are focused solely on this one venture - 30 per cent of the respondents have founded startups before, but are currently running just one. It is possible that a significant proportion of these previous companies simply did not survive in the market. However, this did not discourage the founders and may even have helped them to avoid similar mistakes in their current startup.

### What is your experience with startups so far?









# What would I say to myself at 25?

1. Less emotion – I was often driven by emotions rather than hard data. Now, I would know that the key is to make decisions based on analysis rather than have an emotional reaction to momentary changes in the market.
2. Look beyond the horizon – the philosophy of hit & run, quick profit, thinking in terms of the here and now is a trap. Everything we do in life has consequences, our friendships, going on holiday, choosing our first school. I now know that it is worth building relationships, thinking without emotion and acting, based on data, not reflexes.
3. Education, stupid! I would spend more time educating myself about finances. I would definitely make fewer mistakes and not have to spend so much money on specialists and advisors:)
4. A long holiday – I very much regret that I couldn't afford a one or two year break to explore the world and especially to work in Silicon Valley. I spent several weeks there and there and the contacts I made worked out as a x100 return on investment.
5. Network – I would invest even more in making friends and networking. One of my superpowers right now is being able to contact basically anyone in Poland (in terms of companies in the startup ecosystem). I can't even imagine what I could do if my network was only 10% bigger.
6. Time for myself – at 25, I often did a lot of things incredibly stupidly and crazily, without considering the health debt I was incurring – in a word, I forgot that I was mortal and my body was not indestructible. It was only recently that I started to deal seriously with my health and take care of my sleep time, for example. About 25 years too late:)
7. The educational value of failure – having been brought up in Poland, where failure is a stigma, I repeatedly found even a small failure to be a huge problem and a cause of shame. I was unable to accept and understand how much can be learned from my mistakes.

**Artur Kurasiński**  
entrepreneur, investor, creator



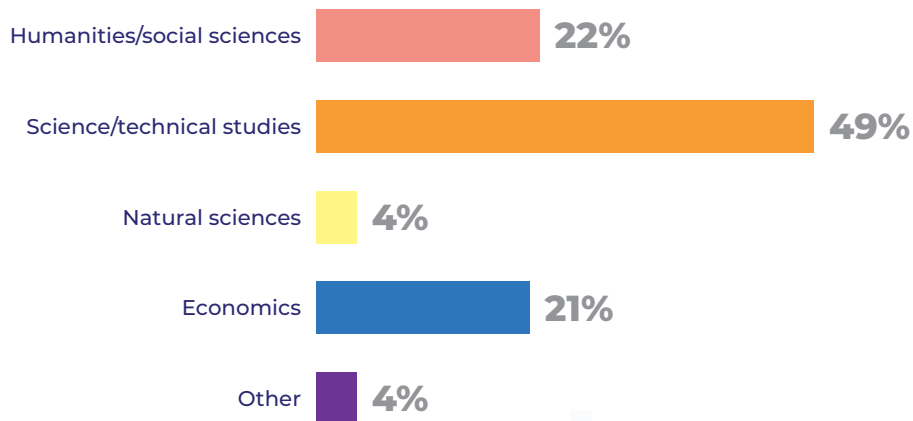
Polish founders boast a higher level of education than the society average. The vast majority have completed higher education with a master's degree (59 per cent) and one in every ten has a bachelor's degree (10 per cent). An engineering degree, on the other hand, is held by 12 per cent. A small but quite significant group have doctorates (5 per cent) and professorships (1 per cent). Some of them are likely to create startups that are university spin-offs, translating the results of their scientific research into business. Some of the founders resigned from their studies without obtaining a degree (8 per cent) and another 2 per cent are still studying. An identical percentage finished their secondary education and never went to university.

### What is your level of education?



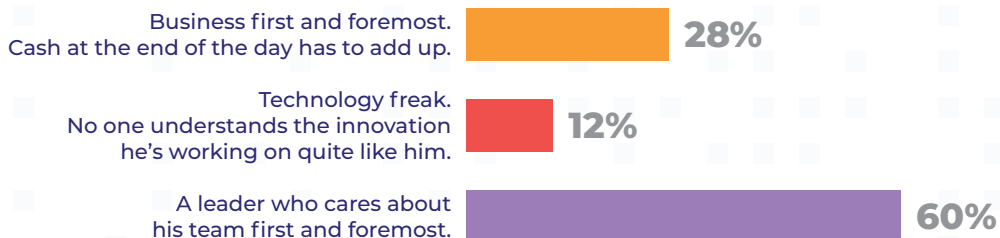
Since a startup is, by definition, a young technology company, it should come as no surprise that it is primarily science and technology graduates who make up the majority of the founders – almost every second one has this type of education (49 per cent). One in five (22 per cent) describes their field of study as humanities or social sciences. The third most popular field of study among startup founders is economics - indicated by 21 per cent of the respondents. Natural sciences are the domain of 4 per cent of those surveyed.

### What is your field of education?



The founders surveyed were also asked for their opinion on the characteristics of the ideal startup founder. Leadership qualities are at the forefront – for 60 per cent of the respondents, the ideal founders are leaders who care about their team first and foremost. A different approach is represented by 28 per cent of those surveyed, for whom business should be the first priority - according to the principle that 'at the end of the day, it's the money that has to add up'. 'Geek' qualities are mentioned by 12 per cent of the respondents. For them, the ideal founder is a "technology freak" – no one understands the technology the startup is working on like they do.

### Ideal founder according to you





# A RECIPE FOR A GOOD LEADER

Growing a business on a global scale is a process that requires careful preparation and long-term planning. A company founder should base his or her business on an inspiring idea or concept that has the potential to contribute to positive change on a global scale. An example of such a foundation could be an innovative technology capable of solving relevant problems around the world. As a project leader, the founder has to create a long-term vision and at the same time put into practice a business strategy based on a thorough background. Passion and motivation drive the process of creating innovative solutions. Commitment and enthusiasm play a key role, especially in the early stages of a start-up and at key moments in the company's development.

In order to achieve business goals, both the founder and the entire team need to be prepared in terms of technology and content. However, management and business development skills are equally important. An effective leader inspires and effectively leads the team, whether it is a start-up or a mature company, transforming ideas into concrete products or services. An essential part of building a sustainable business is finding the right collaborators – talented, ambitious individuals, ready to form an effective and flexible team, resilient to the initial setbacks that are part and parcel of the early stages of growth.

Building and maintaining relationships with other entrepreneurs, investors and industry experts is a key step that can open many doors. The founder should spend time developing contacts both locally and internationally, which will allow the business to scale. Taking a creative approach to marketing, going off the beaten track used by large corporations, enables you to gain a foothold in the market and reach out to customers.

The world of technology and business is constantly evolving and change is inevitable. Flexibility and the ability to adapt to changing conditions, not only in the market but also in society and regulation, are key. Resilience to stress is extremely important. It sounds trivial, but the founder must not fear failure, because the path to success is not a straight line from point A to point B, but a sine wave full of challenges and surprises. The ability to transform difficult business experiences into positive creative outcomes is not easy, but essential to achieve set goals in the business world. Integrity, stability and focus are the qualities of great leaders that help maintain consistency in action and make wise decisions, not only in business but also in personal life, contributing to success on a global scale.

**dr Anna Ogar**  
CEO  
Insignes Labs





# Experience or character traits? What to start a startup with?

Last year, when implementing Google for Startups Ukraine Support Fund, I conducted 300 interviews from which we selected 58 startups. This year, for Growth Academy: AI for Health, I conducted 80 interviews, selecting 30 startups. Many of these companies have already been successful – startups from Ukraine raised USD 13 million in additional funding in one year. These interviews and many years of working with the startup community have shown me that the most important factor for success is an engaged, close-knit team that is not afraid to ask questions and is knowledge-hungry.

When it comes to founders, in my opinion they should be characterised by several things.

## **Inspiring the environment.**

It is necessary to set a precise vision and formulate goals and strategic plans.

## **Determination and perseverance.**

These are probably the most important qualities – running a startup requires a great deal of mental toughness, helping you to overcome difficulties and obstacles by constantly pursuing your goal despite setbacks.



## Leadership skills.

This is the ability to effectively manage a team, motivate employees and create a work culture that supports the growth of the startup. Interpersonal relationships within a team are always very dynamic and can change from day to day.

## Adapting to changing conditions.

This skill also requires flexibility in responding to changes in the market. Professional experience will certainly come to your aid, which can give you the ability to recognise trends and risks.

## Creativity.

It helps to develop innovative thinking and find novel solutions that allow the startup to stand out from the competition.

## Communication.

Effective communication with both the team and customers and partners definitely helps to build relationships and gain support. Startups in our region especially need to work on their presentation skills in front of large audiences and their ability to 'infect' their vision in smaller meetings. I often observe at interviews how startups from our region belittle themselves and are unsure of their capabilities.

When founders possess these personality traits and can boast experience, they have a good chance of success. Of course, lack of experience does not invalidate the chances of it. It only means that founders can make more mistakes. On the other hand, with less experience, we do not see all the risks and are able to take more risks, which can sometimes turn out to be a very good decision.

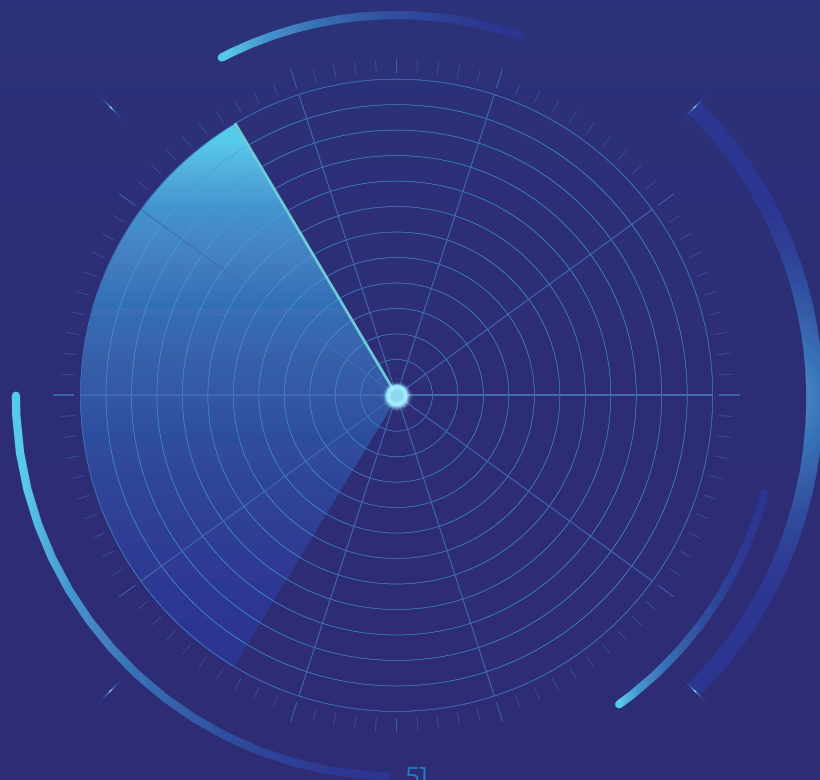
**Magdalena Przelaskowska**  
Senior Startup Partner Manager, EMEA  
Google for Startups





#03

**Strength  
is in the team  
– staff  
competences  
and wellbeing**



## #03

# Strength is in the team – staff competences and wellbeing

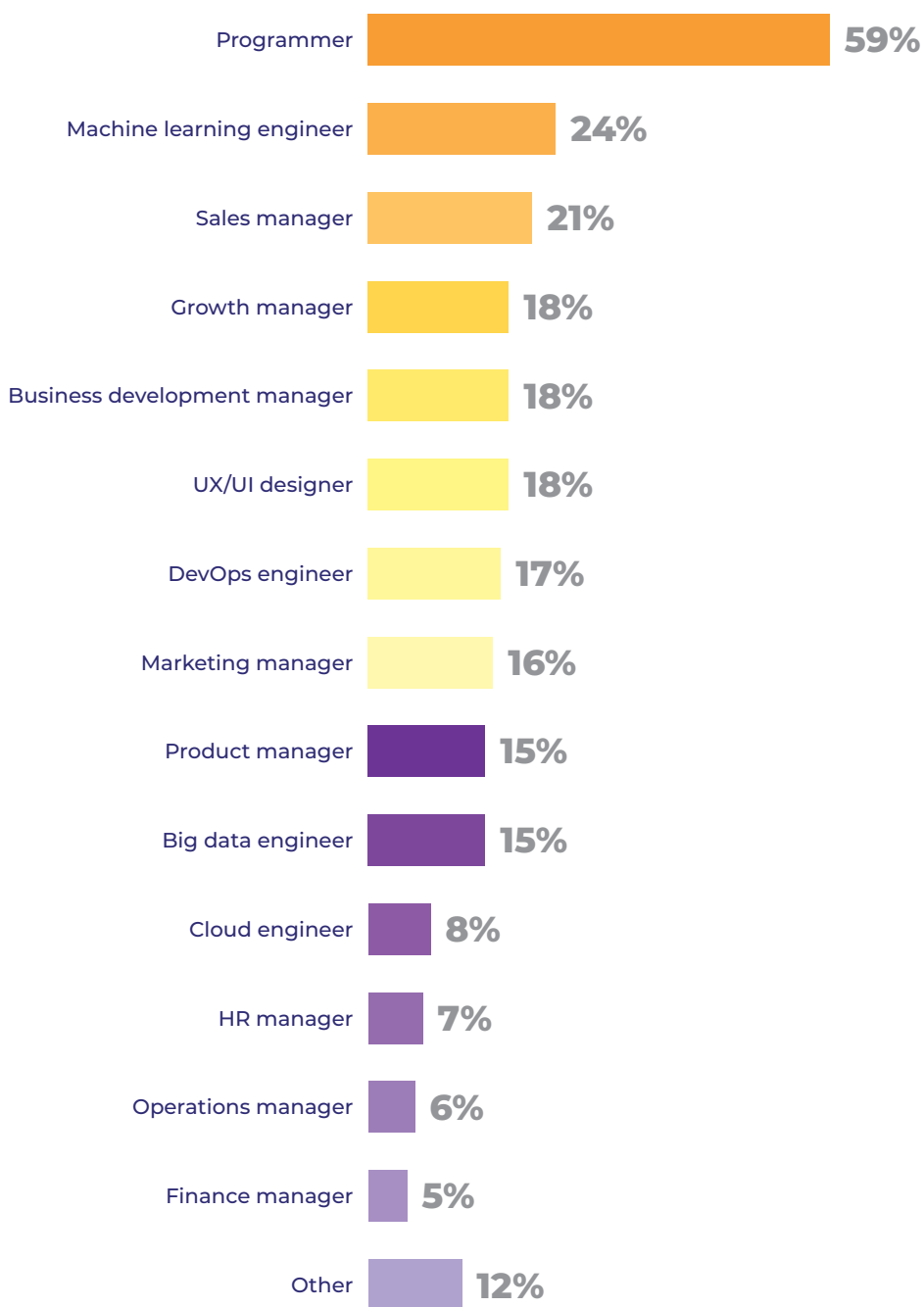
### 3.1 Is there a recipe for the perfect team?

The opinion that the strength of a company lies in its team seems a truism that is difficult to deny, at least to some extent. While in large companies which have on the market for many years and where extensive HR departments, employer branding activities or employee benefits are commonplace, the situation is more difficult in the case of startups. Building a well-functioning team in a startup is a big challenge, but that is why the opinion mentioned at the beginning of this paragraph probably reflects reality even better.

The slowdown in the global startup market and the retreat of investors from technology companies has not yet translated into the number of job offers and salary levels in Poland. Although echoes of global problems are already reaching the Polish IT sector – a wave of layoffs in the largest bigtechs has already drifted past which may also be a harbinger for smaller technology companies – our domestic startups are still recruiting more and more IT employees.

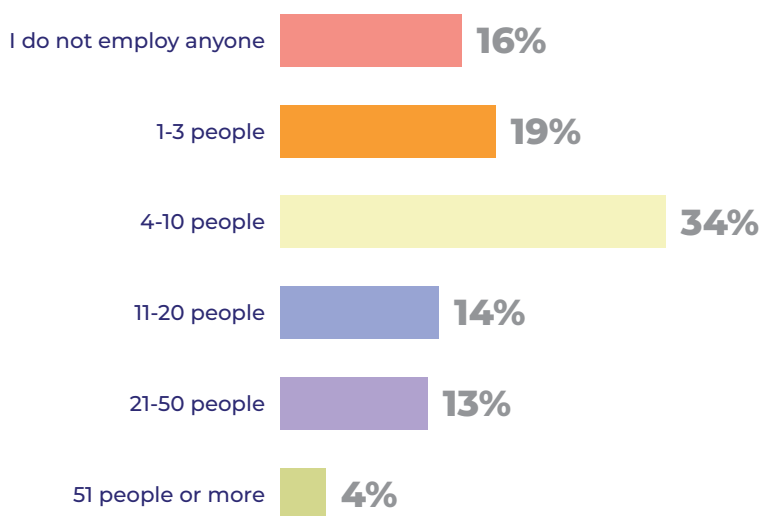
In the survey conducted in 2021, we looked at what professional competences are most lacking in this market. At the time, the respondents mainly pointed to the unavailability of programmers. As many as 59 per cent of the startups indicated that this was the professional group whose shortage bothered them the most. Engineers specialising in creating algorithms for machine learning ranked second. One in four Polish startups (24 per cent) was looking for such specialists. Salespeople are also in demand - one fifth of those questioned indicated that it was difficult for them to recruit a sales manager. In general, the picture that emerged from the survey two years ago was that the lack of professionals in many fields, not only related to IT, is a major problem for Polish startups.

## What competencies are now lacking in startups? Who is the most difficult to recruit?



The latest survey by the Startup Poland Foundation shows that Polish startups form rather small teams usually of a few or a dozen people. More than one in three of them employ between 4 and 10 people on a permanent basis (34 per cent) and almost one in five employs a maximum of three people. There is also a small group of entities that do not employ a single employee on a permanent basis. These are probably early-stage startups funded by the founders' savings.

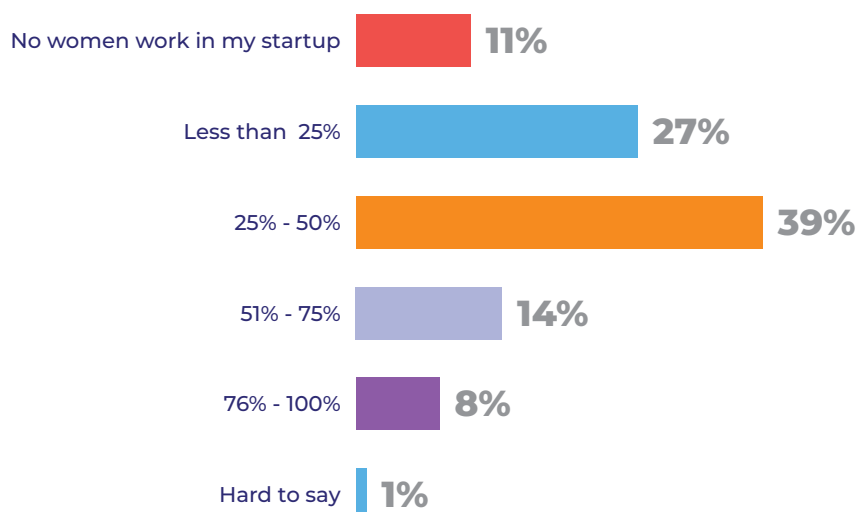
How many people are currently employed by a startup? We are talking about permanent, remunerated cooperation, regardless of the legal form of employment.



Larger teams of more than a dozen people (11 to 20 employees) are employed by 14 per cent of the participating companies. An almost identical percentage (13 per cent) employ between 21 and 50 people and 4 per cent are already quite large teams – larger than 51 employees.

The results of the survey also show what the gender structure is in startup teams. A certain disproportion is still visible here - the majority of startup employees are men, but there is also a group of companies where the majority of the team is female. Entities with 76-100 per cent female employees account for 8 per cent of those surveyed and those where this proportion is 51-15 per cent, another 14 per cent.

What percentage of women work in your startup?



Companies where women make up between 25 and 50 per cent of the team account for the largest percentage in the survey, with 39 per cent of startups indicating this response. A smaller proportion of women (less than 25 per cent) is declared by a further 27 per cent. Startups that do not employ a single woman make up 11 per cent of the entire survey sample. This is quite a large group, but it should be borne in mind that a significant proportion of them may simply employ single people or no one at all and are yet to expand their team.

The situation could certainly be better and the entire startup environment still has a lot of catching up to do in terms of gender parity. However, this is not an exclusively Polish problem – disparities are evident in the global startup ecosystem. This issue seems complex and not easy to change in the short term. Globally, only 15 per cent of the startups have at least one woman among their founders. By contrast, according to a 2021 report by PSIK, Abris Capital Partners and Level20<sup>6</sup>, women account for only 9 per cent of the executives in VC and PE funds in Poland. On the other hand, as many as 21 per cent of the funds surveyed did not have a single woman in their team. In Europe, this level is 16 per cent, and in the United States 15 per cent. 'Female' VCs also have access to smaller funds – 4-6 per cent of total European investments<sup>7</sup>.

So what should the ideal team of a successful startup be like? First and foremost, a diverse one – exploiting the potential of this diversity, employing the best possible people, but at the same time committed to their work. Here, the right balance between high qualifications and therefore higher employment costs and the specific approach of the startup is crucial. The emphasis on innovation, development and ingenuity is also important – all of which can foster commitment and 'infect' with enthusiasm for action.

Of course, much depends on the stage of development – certainly successive funding rounds increase the pool of available talent significantly. With the competition for employees intensifying between startups and corporations, it seems that competing on pay or benefits is already of secondary importance. It is, above all, the enthusiasm and belief in growth, of which the team is an essential part, that can be the key to success. At the same time, they must be aware that enthusiasm alone is not enough in the long run. This is where the employees stock option plan (ESOP), for example, can play a big role. Employee shareholders will identify with their startup much more strongly. This is one of the key advantages startups have over corporations in the competition for employees. (See chapter three for more on the topic of ESOPs).





# Ideal team

Banking, as one of the most regulated sectors of the Polish economy, can be a difficult and demanding partner for innovative companies. Our expectations of the skills possessed by the team may vary depending on the specific startup, its industry and business objectives. Invariably, however, the key element of successful cooperation remains understanding and a clear definition of expectations and benefits for both parties. This is particularly important if we are talking about partnerships.

If I were to identify a few specific skills that, when adapting a new technology in a large organisation, can make the process go smoothly, these would certainly be:

- understanding the business – both in terms of your own market fit and your partner's position, needs and capabilities;
- being ready to solve unforeseen problems – the startup should be open to suggestions and feedback from the partner and ready to adapt its solutions, which is significantly related to point three;
- caring about quality and security – PKO Bank Polski, which is the largest financial institution in Central and Eastern Europe with a portfolio of 11 million customers, puts quality and security first. Every team whose solution involves data processing must be fully ready to cooperate with the internal Security Department and comply with the general rules of the national regulator;
- effective project management – the success of pilots; although these are carried out on a small group of customers, they are key to signing a proper contract for a wide implementation. If the team does not show adequate commitment to the project in the early stages, the result could be a break in cooperation.

**Karol Szymański**  
Innovative Projects Manager  
PKO Bank Polski





# People who can talk to one another profit the most

A variety of factors are necessary for a team to be effective. Technology, implementation of methodologies and bottom-up initiatives are just some of them. Personally, however, I believe that people, autonomy and communication are the most important. In one study (Zippia), when asked, "What is the most important thing that would induce your better job performance?" – 37% of the respondents answered that they would like to be noticed. In order to get people noticed in our organisations, it makes sense to start by building authentic relationships with them. These lead to trust, which in turn is a guarantee of security and the basis of business.

According to Harvard Business Review, 79% of team members are more engaged when they have the ability to make decisions for themselves. Therefore, the next step, after building trust, should be transparency and openness. They are the reason for the increased autonomy that characterises teams with an average 5.2% higher productivity.

Another thing needed for good collaboration is communication. Thanks to their ability to verbalise their thoughts and present them, teams are better able to work, communicate among themselves and identify needs or solutions. This is a particularly important, but also extremely difficult skill in the age of remote or hybrid working. 86% of employees and managers cite a lack of effective collaboration and communication as the main reasons why teams fail. As many as 28% of employees believe that poor communication is the cause of their inability to get work done within a certain timeframe. The art of communication helps to communicate the results of one's own or the team's work in a logical, structured and clear way. This gives a different dimension to the visualisation of ideas, solutions or data.

**Adam Trojańczyk**  
CEO  
Inwedo



# An organisation is only as strong as its weakest link

In the start-up world, the pace of change is dizzying and upskilling is a key element of success – as it is from the point of view of investors. Technological breakthroughs, increasing competition, company fires, the impact of the technological revolution on the business environment – entrepreneurs need to upskill all the time, but is everyone ready?

Undoubtedly, the right skills are essential for success. But it is not just about the individual skills of the founders, but also those of the team. The value of a start-up often comes from the synergy of different competences, which is why it is said that an organisation is only as strong as its weakest link. At RKKVC, when investing in technology companies, we always want to see a CTO in the team, and we also want to see that the CEO understands the market very well and successfully sells his or her services, with customers returning regularly. On the other hand, we believe that success does not only depend on hard skills. It is a matter of the so-called mindset of the founders and the ambition of the employees.

We have seen many times that sooner or later companies reach their ceiling, which is actually related to the blockages in the founder's mind. This is why we advise founders to have coaches to help improve their professional skills and support the development of emotional awareness.

Here we come to an extremely important topic in the context of technology company employees – attracting and retaining the best talent. For a startup to succeed, it must have a team of skilled, passionate and motivated individuals who are willing to work hard to go the so-called ‘extra mile’. However, in today’s competitive labour market, attracting talent can be a challenge, especially for startups. Companies in partnership with funds can offer an employee development programme, which should help startups stand out and make it easier to attract the best employees. By offering opportunities for development, learning and improvement, startups can show potential employees that they are investing in their careers and helping them achieve their career goals. This can be an important persuasive argument for candidates looking for a company that can offer them more than just a job.

In conclusion, upskilling is indispensable. Team competence is key, but developing human potential is also a priority. It is not only important to acquire knowledge and skills, but also to develop the awareness and flexibility to meet the challenges that life in the startup world brings.

**Mateusz Bodio**  
founder & managing director  
RKKVC



## 3.2 Upgrading skills – competences needed in a team

In order to retain the team and prevent employees from moving on to competitors, it is also worthwhile taking care of their personal development. Offers of various types of training aimed directly at startups are widely available. A survey conducted by GoodHabitZ in 2021 shows that as many as 64 per cent of Polish employees would like to improve their competences. According to this survey, employees would most like to develop their language skills – as many as 31 per cent selected this area of development as the most desirable. GoodHabitZ experts also point to a growing challenge that Polish companies have been facing for several years. Polish startups are hiring more and more foreigners who in turn want to learn the Polish language, making it easier for them to integrate with the entire team<sup>8</sup>.

For the purposes of the 'Polish Startups 2021' report, we studied in detail the issues of training and the improvement of skills in startups. Among startup employees receiving training, those in marketing (39 per cent) and sales (33 per cent) were the most popular. A slightly smaller percentage trained in programming (28 per cent). A quarter of them indicated training related to project management and 22 per cent related to work organisation in the company. A further 17 per cent of the startups trained their employees in the areas of programming and creating machine learning and AI algorithms.

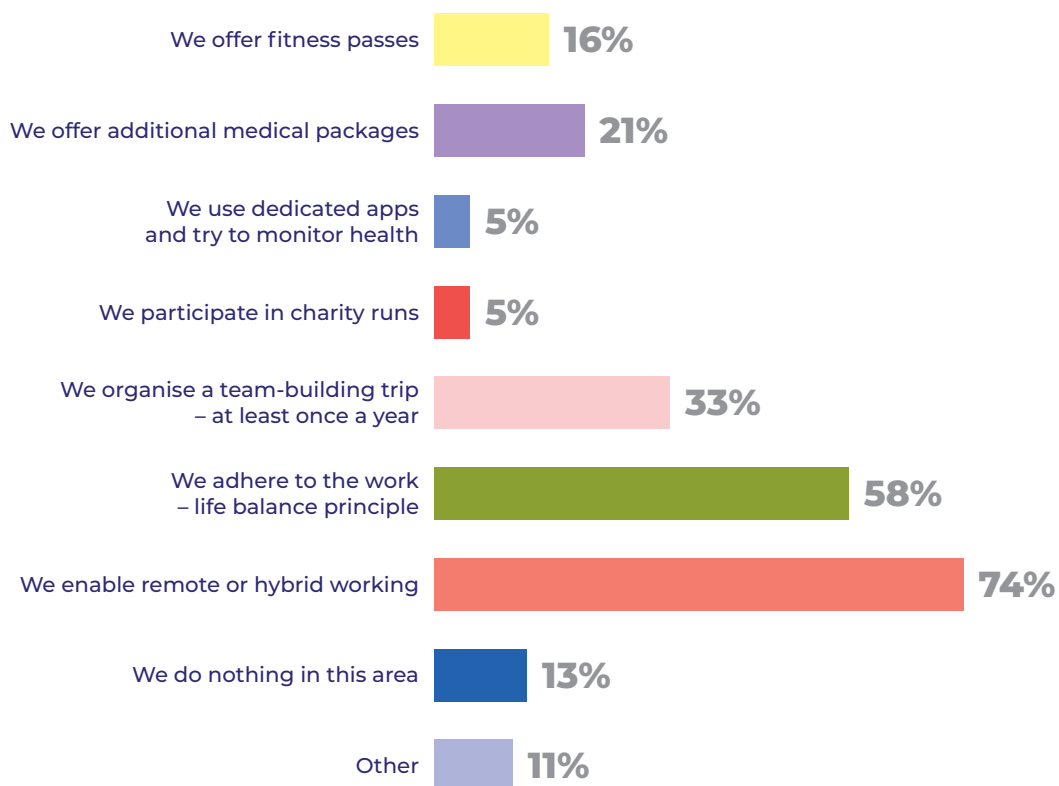
## Which training courses do you use?



When it comes to competencies connected with company management and growth, startups also pointed to training related to global business scaling, finance and accounting (14 per cent each), customer service (11 per cent), pitching, logistics management, supply chain and distribution management (8 per cent each), HR and risk assessment (6 per cent each). Among the training courses used by Polish startup founders, there are those that teach soft skills that are also essential in modern business. More than one in 10 respondents practised emotional intelligence as well as leadership and communication during training (11 per cent each). Another 6 per cent indicated training in time management and 3 per cent in stress management.

However, training courses and qualification opportunities alone are not enough to be reassured about the stability of the team in the current market conditions. For the most part, startups are therefore trying to offer tools to support employee wellbeing. When asked about this, the majority of startups – 58 per cent – declare that they adhere to the principle of work-life balance, which largely means no excessive workload, the right to be offline, flexibility of working hours, etc. Remote or hybrid working is also proving to be a legacy of the pandemic period. As many as three quarters of the startups (74 per cent) allow their employees to work in this way.

#### How does your startup look after the wellbeing of your employees?





One in three startups surveyed (33 per cent) organises a team-building trip at least once a year. Typical employee benefits such as additional medical packages or fitness passes are offered to their employees by 21 per cent and 16 per cent respectively. Less common proposals include special applications to monitor the health of employees (5 per cent) and participation in charity runs (5 per cent). No such activities intended for employees are declared by 13 per cent of the companies surveyed.

It seems, therefore, that startups are not particularly outliers when it comes to looking after employee wellbeing. There are many indications that in the battle for employees, benefits will have to be increasingly individualised and tailored to needs that are less obvious than the anecdotal and ridiculously treated 'fruit Thursdays' or medical care, which many candidates treat as standard. The halo of 'coolness' related to working at a startup is clearly not enough to attract the best talent. The question is how much this can change now that the source of funding is definitely drying up. There will be a dilemma to be faced in the forthcoming months and perhaps years.



# Flexibility at the price of stability – what wellbeing looks like in startups

In the cited study, we see that when talking about wellbeing in a startup, the possibility of remote/hybrid working stands out. Flexibility and not adhering to the rigid working rules typical in corporations is what attracts many people to take the startup path. I am not just referring to founders here, but also to employed staff who are writing themselves into this adventure.

In a startup, there is no time for micromanagement – no one stands over the employees with a watch and holds them accountable for every movement. What matters is the result, not the hours sat down. This gives employees more freedom to organise their own time, which in turn translates into the ability to take care of their work-life balance, which ranks second in the survey. In such an order, I can go to the doctor or yoga in the morning and then spend longer on emails and I don't have to ask my superiors for 'permission'. For many independent yet hard-working souls, this is the ideal arrangement.

On the other hand, a topic that is rarely discussed but has a huge impact on the wellbeing of startups is the lack of stability. We have been supporting startups and technology companies at HearMe for years. In recent quarters in particular, we have noticed an increase in challenges such as uncertainty about the future, anxiety or increased and prolonged stress. This trend is a reflection of the challenging situation in the vc and startup market – valuations have fallen, funding is increasingly difficult to come by, and the wave of layoffs and the struggle for break-even only add to the sense of instability, which even in times of prosperity (read: availability of capital) was strongly felt. These factors have a direct impact on the wellbeing of our people and

ourselves.

In the reality of constant change and weekly budget updates, we cannot forget one thing that is skyrocketingly important – taking care of ourselves. Just like in a plane when an adult first puts on an oxygen mask and then helps a child, the founders and the leadership need to take care of themselves in difficult times to support their team.

In the flurry of daily tasks and surfing the wave of constant change, let's not forget that we are not robots – we have the right to rest, set boundaries, take care of our heads, share our concerns with others and give 70% or even 51% of ourselves most of the time because, after all, it's impossible to give 120%.

**Kasia Gryzłó**  
CEO  
HearMe/Emplomind

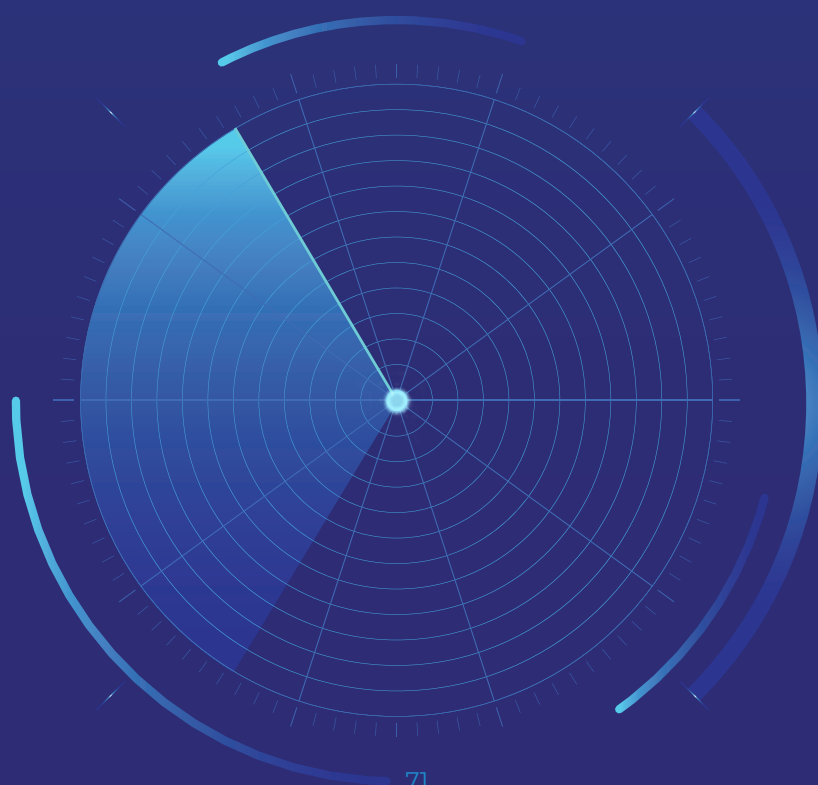






#04

# Funding



# #04

## Funding

### 4.1. Revenues, investments and rounds

In the previous edition of the 'Polish Startups' report, published at the end of 2022, we considered the phenomenon of the market bubble and whether we were on the eve of it bursting. The situation on foreign markets, particularly in the United States, was already changing significantly for the worse, but in Poland this negative trend had not yet appeared. Only 7 per cent of the startups at the time of last year's survey felt a decline in foreign investors' interest in the Polish market. A much larger proportion (38 per cent) had not yet felt this negative trend. More than one in two startups, however, gave the answer 'hard to say', which we interpreted as a potential harbinger of a slowdown. PFR Ventures analysts then calculated that the value of our startup market compared to 2021 remained unchanged, which against the background of global downward trends was a positive sign.

Today, one year on, we know that although we have not had a spectacular bursting of the startup bubble, the deterioration has finally arrived here too. Although it is more like a slowly drying stream with less and less flow. Indeed, investors are far less enthusiastic about startups than in previous years.

However, let's first have a look at the situation in other VC markets, where the mood is currently truly bleak. In 2023, investors continued to cut back on startup funding. Many hoped that the emergence of solutions such as ChatGPT and related solutions would resurrect investor interest and appetite, at least when it came to AI-based startups. Unfortunately, these hopes have proved to be in vain.

Crunchbase data shows that venture capital funding in the second quarter of 2023 fell by 18 per cent (quarter-on-quarter) to USD 65 billion. On a yearly basis, this decline is even significantly higher, i.e. by 49 per cent compared to the second quarter of 2022, when startup investors spent USD 127 billion.

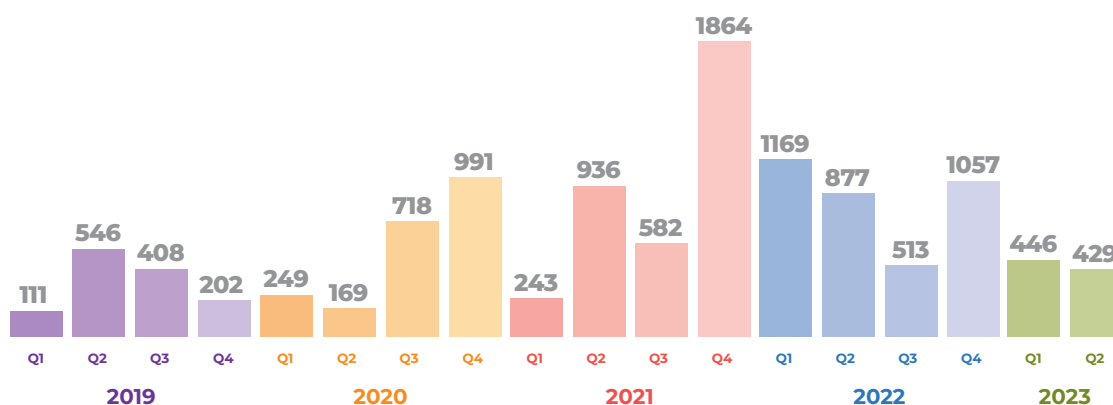


The figures turn out to be even worse if we look at the first half of 2023 as a whole. At that time, VC capital invested in startups totalled only USD 144 billion, compared to USD 293 billion invested in the first half of 2022. This represents a decline of as much as 51 per cent.

According to calculations by Crunchbase analysts, almost one-fifth of total global venture funding this year came exclusively from the artificial intelligence sector. So without this moment of enthusiasm generated by the launch of ChatGPT by OpenAI in November 2022, venture funding so far in 2023 would be even less.

And what is the situation in Poland? Unfortunately, we no longer stand out on the plus side this time compared to other markets. In a recent report by PFR Ventures and Inovo VC summarising transactions on the Polish venture capital (VC) market in the second quarter of 2023, we read that in this period 116 companies raised PLN 429 million from 69 funds. Looking at the data on a six-month basis, there was a 70 per cent year-on-year decline.

**New data on the Polish VC market.  
Q2 2023 (m PLN)**

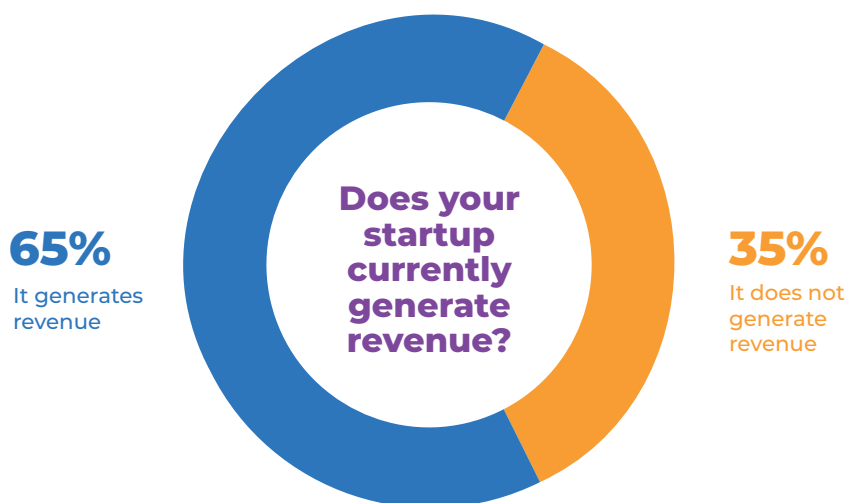


Source: PFR Ventures, Inovo VC

We asked startups about their current financial situation in our latest survey. The majority of respondents declared that their company was generating revenue - this was the answer given by 65 per cent of them.

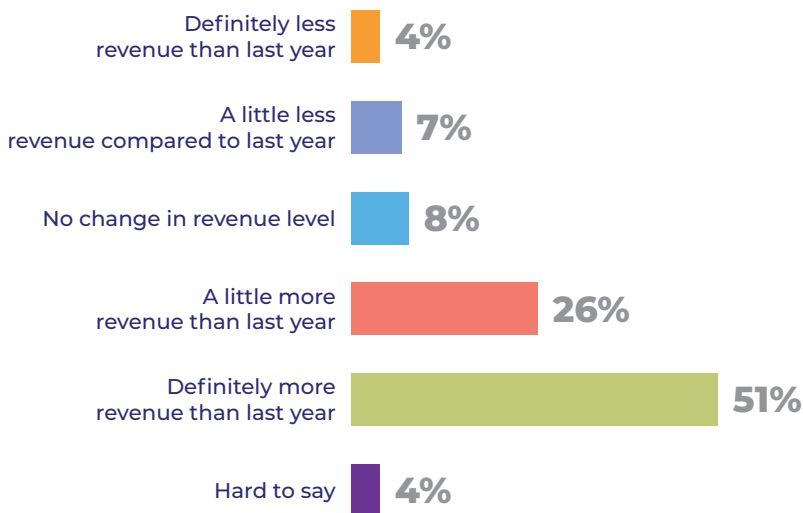
Despite the disastrous news from the capital market increasingly unwilling to finance startups, the situation in most Polish technology companies is currently better than it was a year ago. Perhaps it is the postponed effect of earlier rounds and the skilful use of money already raised from investors.

As it turns out, more than half (51 per cent) of the startups are generating significantly higher revenues than last year and 26 per cent are generating slightly better revenues than a year ago. For 8 per cent, the revenue situation is the same as in 2022.



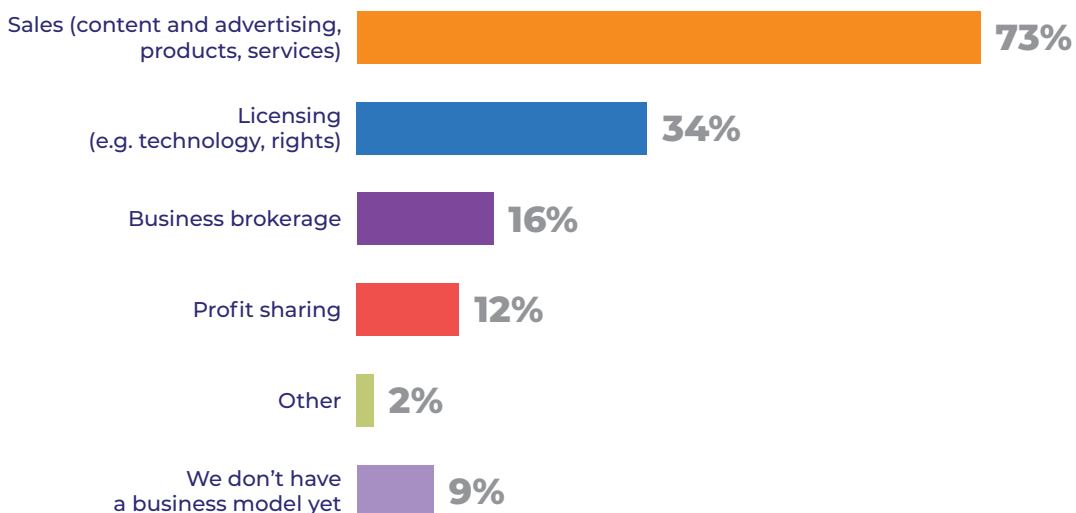
A slight deterioration in their situation is complained about by 7 per cent of those questioned. Worse moods can definitely be seen in 4 per cent of the surveyed companies. It is certainly worth keeping an eye on whether and how this trend will develop in the near future and whether the poor condition of the market as a whole will translate more into revenues being generated by startups

Comparing your startup's current revenue for the first half of the year with the same period last year, how would you rate the change?



In terms of revenue models, the vast majority of startups make money through sales, e.g. content and advertising, products or services (73 per cent of the responses). Another relatively popular form of revenue generation is licensing, e.g. technology or product usage rights. This is how more than one in three startups operate (34 per cent). A further 16 per cent make money through business-to-business (B2B) intermediation and 12 per cent through profit-sharing. Almost one in ten startups surveyed (9 per cent) does not yet have its own revenue model.

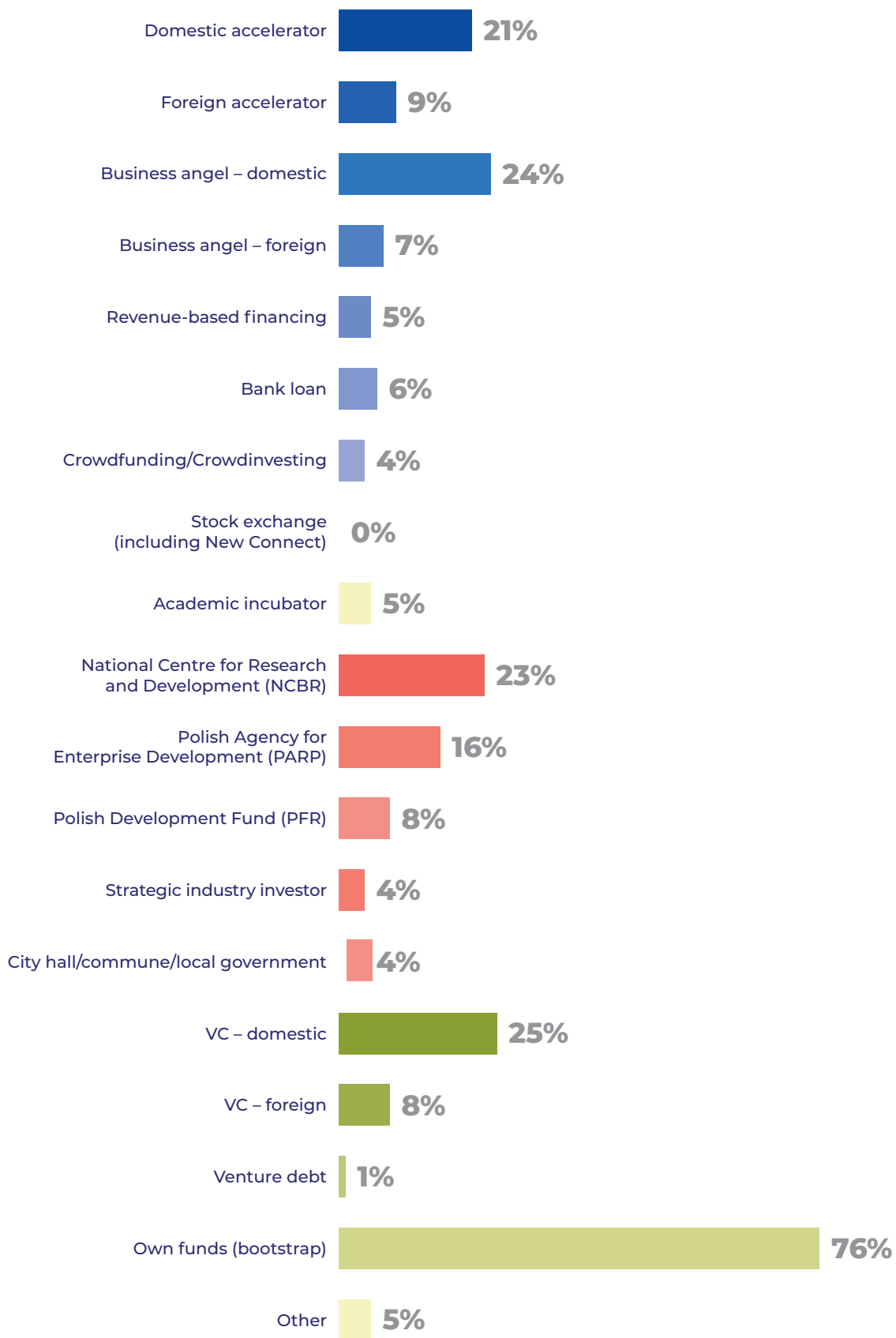
Which revenue models does your startup use?



In fact, almost every startup starts out with its own money – usually the founders' own savings. So-called bootstrapping is the baptism of fire for every founder before the company can count on raising external capital. In the survey by the Startup Poland Foundation, as many as 76 per cent of the respondents indicated that they had invested their own money in their startup.

When it comes to external funding, domestic VC funds are the most commonly mentioned, with 25 per cent of the respondents benefiting from their support. From the foreign VC market, funding was received by 8 per cent of them. Next in line, founders point to business angels - also more often domestic ones (24 per cent) than foreign ones (7 per cent).

## What sources of capital have you used so far?



Once again, it can be seen how state-owned entities play a key role on our market – 23 per cent of the startups received funding from the National Centre for Research and Development, 16 per cent from PARP (Polish Agency for Enterprise Development) and 8 per cent from PFR (Polish Development Fund). Accelerators also rank quite high – here again, mainly the domestic ones. They were indicated by one in five startups (21 per cent). Support from a foreign accelerator was used by 9 per cent of the companies. Revenue-based financing was generated by 5 per cent of the respondents.

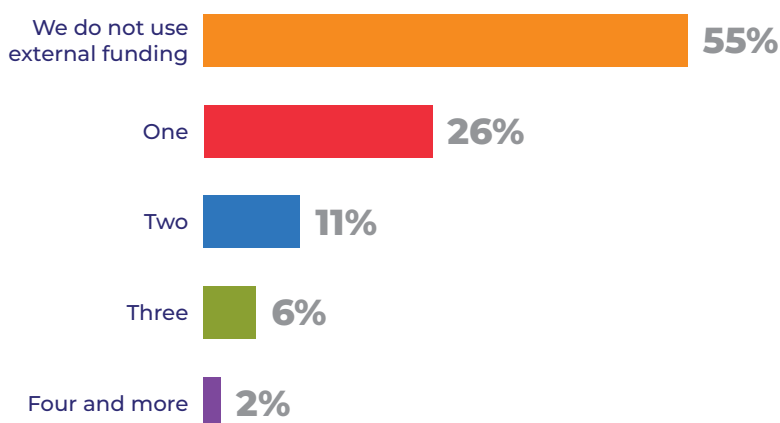
The sources of funding listed above are the most popular ones. However, there is also a whole range of other types of support that are important, although, although used on a much smaller scale. A bank loan was used by 6 per cent of those surveyed and support from an industry investor by only 5 per cent.

The activity of universities seems to be relatively low – only 5 per cent of the startups used the university incubator. Slightly fewer obtained support from local government programmes (4 per cent). There are still very few projects in Poland funded through crowdfunding (only 4 per cent).

On the other hand, the stock market, including the theoretically ideal option for a startup at a certain stage of development to enter the New Connect market, turns out to be completely niche. The so-called venture debt, a tool popular on Western markets, is also marginal and in Poland still very much absent in the minds of startups.

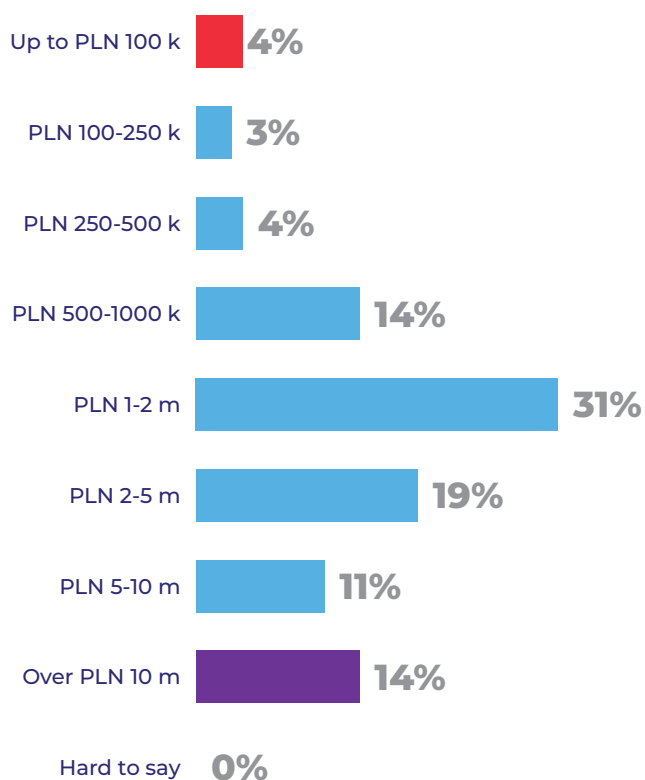
Among the startups surveyed that have already managed to raise external funding, the largest percentage (26 per cent) have only one round behind them. Slightly more than one in 10 startups have raised two funding rounds to date and three rounds were declared by 6 per cent of them. Entities with four or more rounds behind them account for 2 per cent of the surveyed participants.

If you are using external funding, how many funding rounds have there been so far?



What amounts have Polish startups managed to raise in all rounds so far? The largest group is comprised of companies that have raised capital of between PLN 1 and 2 million in this way – 31 per cent of the startups gave such an answer. Another 19 per cent declared a sum of PLN 2-5 million, for 11 per cent it was between PLN 5 and 10 million. Startups with rounds that raised more than PLN 10 million account for 14 per cent of all respondents.

#### What is the total amount of funding from all rounds to date?



However, not everyone has been able to raise capital in the millions - 14 per cent of the respondents declare an amount between PLN 500,000 and 1 million, a further 4 per cent between 300,000 and 500,000 and 7 per cent have raised a maximum of PLN 300,000 in previous rounds.





# Stability of the Polish venture capital market in 2023

The year 2023 in the Polish venture capital market has proven to be surprisingly stable. The total value of investments in each of the three full quarters amounted to approximately PLN 420-450 million. So far, we have also not recorded any so-called outliers, i.e. transactions whose value exceeded 10% of the total market.

Looking at it from a different perspective, from the beginning of the year to the end of September, nearly PLN 1.3 billion flowed into Polish innovative companies. This is more than in the whole of 2019, which opened a new stage in the development of the Polish VC market. And more than in 2020, if we subtract the image-distorting rounds of Booksy, Brainly and ICEYE. This is good news, because it means that even in a period of global slowdown and declining valuations, we did not go back too far.

In the second half of the year, we started to see a significant decline in the number of seed rounds. This is due to two overlapping phenomena: the global decline in valuations and the number of deals, but also the end of the horizon of the POIR programme, under which we provided investment capital to more than 40 Polish VC teams, the majority of which were IPOs.

In parallel, the number of A and B rounds has increased. This means that Polish innovative companies are developing and raising capital – no longer for building a product or verifying it on the market, but for expansion. This is a good prognosis for the entire ecosystem and a signal to the world that Polish startups are moving beyond the seed stage.

Next year, we expect the trend to reverse. We are working on implementing funds from the European Funds for the New Economy (FENG) programme. They will allow us to inject around 50 VC funds with a public contribution of PLN 1.9 billion and an additional PLN 1.3 billion from private investors. We expect the first startups to receive funding from the new funds as early as mid-year. Capital from private funds or from international financial institutions is also available on the market all the time.

In the upcoming months, we should hear about rounds of startups that previously raised funding in 2021-2022. The best founders of innovative companies will be able to convince investors and raise growth capital. The terms of the deal may be less satisfactory for them than 2-3 years ago, but they will certainly not be able to complain about a lack of capital.

**Maciej Ćwikiewicz**  
President of  
PFR Ventures





# Controlling in a startup – how to do it right?

## Does a startup need a CFO?

Have you ever wondered why so many startups fail? When you type “top 10 reasons for startup failure” into Google, almost every list includes the point “run out of cash” or another finance-related issue. It is clear, then, that finances are an indispensable part of a startup’s success.

The key to proper financial management in a startup is to consider three fundamental areas: internal processes, accounting and controlling. It is impossible to run controlling effectively by ignoring the first two steps. Gaps in internal processes or poor quality accounting will directly affect the quality of reports, leading to erroneous conclusions.

In my experience, a person who is often underestimated, but who plays an important role in a company, is the person who takes care of the collection of documents, invoicing or payments. This is where it all starts! Add to this a good, responsive accountancy firm that uses modern IT tools and takes care of data security. We then have solid financial pillars.

Next, the habits of the founders. Keeping budgets up to date, controlling liquidity and runway, regularly analysing reports and making good investment decisions – these are essential activities. Just when dealing with all this, can entrepreneurs find the time to develop the business?

Running a start-up is like balancing on a tightrope. Even if many things are going well, a blip in the finances can make it all come crashing down. However, finance alone will not do your innovative service/product for you, nor will it reach new customers. My observations of the market show that it is only over time, as a company grows, that finance starts to play an increasingly important role. In the start-up phase (preseed, seed) you simply have to control when you run out of cash!

Does a startup need an experienced CFO in this situation? In my opinion, no. Especially as many CFOs have gained experience in large structures, which will not work in the dynamic world of startups. Hiring a full-time CFO is a considerable expense and investment, which only becomes worthwhile when we are talking about larger scale operations or significant funding.

Until then, a financial analyst or the use of an external CFO may prove to be the happy medium mean between competence and cost.

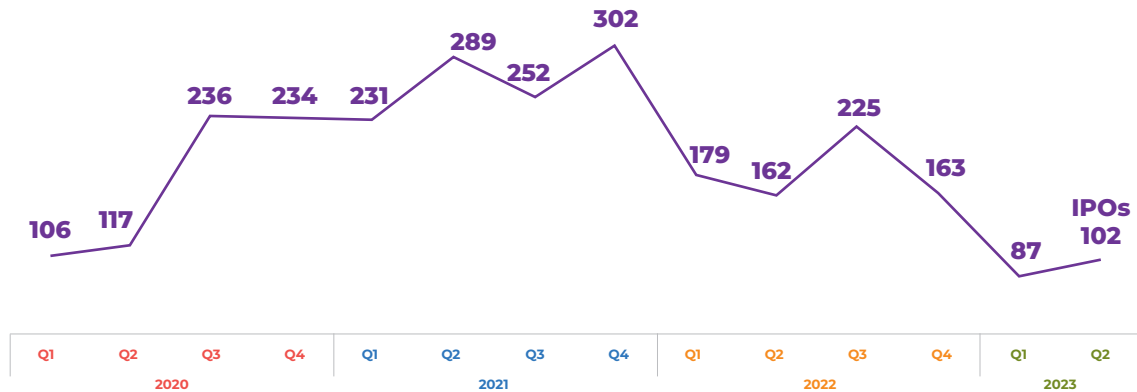
**Adam Zagala**  
Managing Partner  
Value Finance



## 4.2. Exits

The poor health of the global startup sector manifests itself not only in declining investment numbers, but also in exits. Data from CB Insights shows that the number of startups worth more than USD 50 million fell in 2023 to just 7 per cent of the value listed in 2021. In contrast, the value of transactions for exits above USD 1 billion already fell by more than 90 per cent in 2022. The data further shows that the worst year for startups looking to go public was last year, when globally the number of IPOs fell by 31 per cent to 716. Since the second quarter of 2023, an increase of 17 per cent has been recorded.<sup>10</sup>

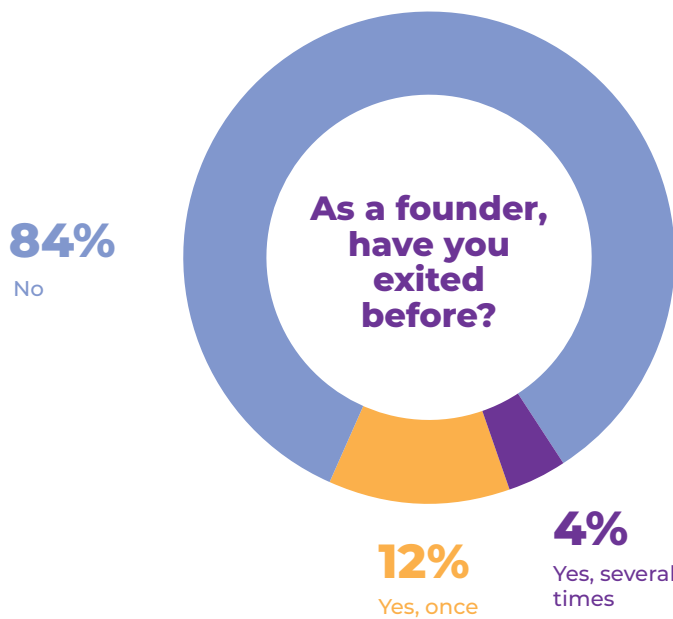
IPO market sees an upswing in Q2'23 but hasn't thawed yet



Source: CBInsights

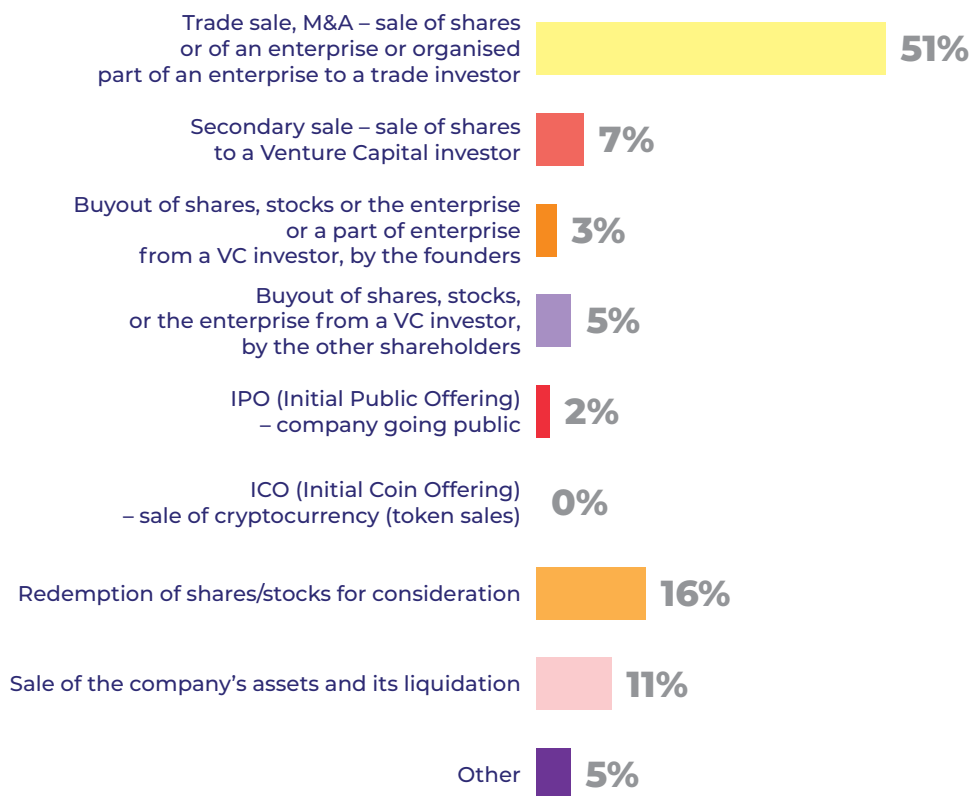
The vast majority of Polish startups are still at a relatively early stage of development, hence exit statistics can hardly be considered impressive, but the same was true in times of greater prosperity. It is simply that our domestic startup market has not yet developed enough, although the current situation is certainly not conducive to this development.

The vast majority of startup founders surveyed in the Startup Poland survey have not yet made a single exit - 84 per cent of those questioned have no such experience. Those startup founders who declared that they have already made an exit in the past account for 16 per cent, of whom 12 per cent have done so once and 4 per cent have done so several times.



For those who have already made an exit at least once, the most preferred method is the trade sale / M&A, i.e. the sale of shares or stocks or of the entire company or part of the company to an industry investor. This type of transaction is indicated by more than half of those surveyed who have already made an exit (51 per cent).

**How did your exit end?**







# Exits should no longer be a taboo

When setting up startups, it is crucial to keep two things in mind. Firstly, it is creating new, innovative solutions that change our world and environment for the better. Secondly, in very broad terms, returns and exits. In relation to the first issue, there is obviously a lot of discussion and ideas in our ecosystem about how to create innovation. Unfortunately, when it comes to the exit from a startup itself, my observation is it is still something of a taboo subject.

In Poland, startups are often treated by founders as their own children. The decision to exit, i.e. to leave the business, evokes very strong emotions or, unfortunately, is often not even considered. I remember that I also once shared these dilemmas myself and had a lot of fears about putting my own child into someone else's hands. It was hard for me to imagine that a company I had worked very hard to develop would be sold. I definitely treated the business.link network as my own child. Nevertheless, after breaking through and deciding to exit, I by no means regret this step. I still have a huge fondness for the brand and identify with it, but I can also see how much opportunity opened up for the business after the shares were sold to Skanska, a global brand. This personal experience has taught me that an exit is not the end, but a new chapter in the story of a company's development.

The decision to found a startup is only the beginning of an entrepreneur's journey. Equally important is the decision to exit. It is not only a direction for ourselves as entrepreneurs, but also an opportunity for the company to grow further and returns for investors and founders. It is sometimes worth making the decision, perhaps a tough one for us as entrepreneurs, to exit in order to allow the company and existing shareholders to grow even faster.

**Dariusz Żuk**  
CEO & Founder  
AIP Seed



Other methods of exit are far rarer in the founders' history to date and were not always a positive action. For 16 per cent of those surveyed, exit meant the redemption of shares for consideration and for 11 per cent it meant selling off the company's assets and liquidating it.

The so-called secondary sale - the sale of shares or stocks to a VC investor – was chosen by 7 per cent of the founders making an exit, while a further 5 per cent of founders had the option of buying out shares, stocks or the entire company themselves from such an investor. A buyout from a VC investor by other shareholders is declared by 3 per cent of those surveyed. Only 2 per cent of the survey participants declare an exit in the form of an IPO, i.e. going public and selling shares to stock market investors. Seeing the stock exchange in such a low position should not come as a surprise especially now, when the global IPO market is in a very bad situation. On the Polish trading floor, the number of IPOs is literally almost zero.

### **4.3. ESOPs**

The subject of ESOPs has been strongly raised by the Startup Poland Foundation for several years now. Surveys carried out in successive years examine the approach of Polish startups to this issue every time. While ESOPs are a very popular solution in startups in the West (primarily in the United States), in Poland they are still not the default option for some or all of the team working at a startup.

At this point, it is worth recalling what an ESOP is. It stands for employee stock ownership plan. It is a kind of employee stock ownership plan, where you increase employee involvement by giving them shareholding rights in a startup. Unfortunately, this is something that definitely distinguishes our startup sector from those more developed. However, this is an effect of specific Polish conditions and not the unwillingness of founders to share the value of the company with their team. Although, as Startup Poland's survey shows, the climate for ESOPs is also slowly changing here. (Last year's figures were more favourable than this year's and the multi-year trend is definitely positive).

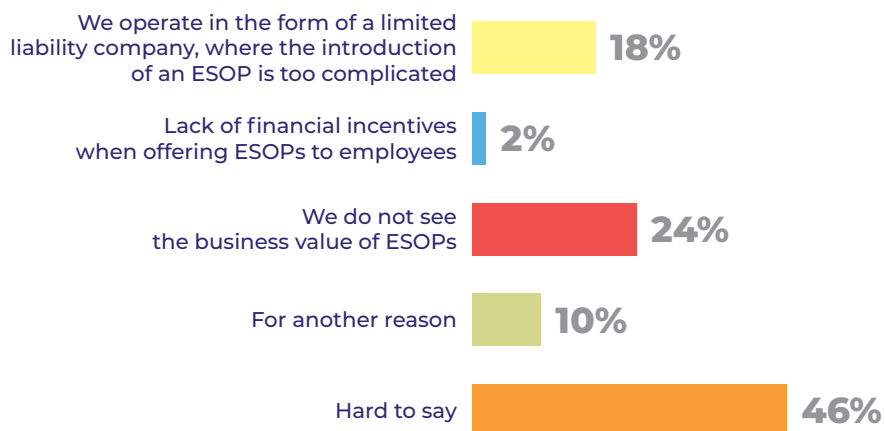
In 2019, only 22 per cent of the startups surveyed declared that they were using an ESOP programme. Today, there are already 30 per cent of such startups and a further 39 per cent, although they have not implemented it to date, have plans to do so. The survey shows that 31 per cent of the founders do not use or plan to use an ESOP programme.



In order to better understand why startups do not want such a solution in their companies, the survey also asked about this aspect. However, the largest group (46 per cent) was unable to give a specific reason. This could mean that they are simply not familiar with this solution or know too little about it. This is therefore an opportunity to overcome this reluctance. One in four respondents (24 per cent) is strongly against ESOPs - they do not see the business value of introducing this solution.

Another reason identified in the survey is not so much reluctance as objective legal aspects. The problems here stem from the very structure of limited liability companies – and this is the form in which a significant percentage of Polish startups operate. That is why 18 per cent declare that they operate in the form of limited liability companies, where the introduction of ESOPs is too complicated in terms of legal aspects. A smaller group (2 per cent) complains about the lack of financial incentives when offering ESOPs to their employees.

#### For what reason?





# ESOP: A challenge or an effective tool for employee motivation?

Employee stock ownership plans (ESOPs) can be a powerful tool in building loyalty not only in the startup world, but also in any company. Many male and female entrepreneurs building their organisations in developed markets and even more employees who joined them at an early stage have found this out. As companies become successful, the experts and experts hired have multiplied their wealth just through ESOPs.

The growing trend of companies using ESOPs in Poland is very important and necessary for building a startup ecosystem. Employees using ESOPs can become another group of investors, gain financial stability, and the means to invest in further projects, which fuels the growth of the market and further accelerates the development of the startup market.

As many as 30% of startups are already using ESOPs. However, 24% do not see business value in this system and another 46% cannot answer why they do not use this solution.

In order for these proportions to change, it is worth betting on education and presenting – to both companies and employees – the value and benefits of using ESOPs.

By giving employees a stake in the company, an ESOP can help align their interests with the long-term success of the business. This can lead to increased employee engagement, productivity and retention. Participants in an employee share ownership plan who have shares in the company are more motivated to work and make decisions that help the company grow and succeed. This alignment of interests can be particularly important in startups, where the team is more willing to make sacrifices and take risks when they know they will share in the company's rewards or profits.

Employees who own shares in a company feel part of a larger organisation. The feeling of building something in which they have a stake and an economic interest motivates them to act. ESOPs can also be a valuable tool for attracting and retaining the best talent, which is particularly important in a competitive labour market. By offering shares and the potential for asset enhancement to particularly experienced professionals, we can diversify their remuneration and offer a healthy salary mix at the expense of an exorbitant salary. A well-designed ESOP also helps to reduce employee turnover – employees are less likely to leave if they have a long-term interest in its success.

Of course, there are also challenges to implementing an ESOP. Preparing a good shareholder plan requires proper design at an early stage and using the best market standards. Despite these challenges, it is a very valuable tool in building and growing startups.

**Michał Kramarz**

Head of Google for Startups,  
Central Europe



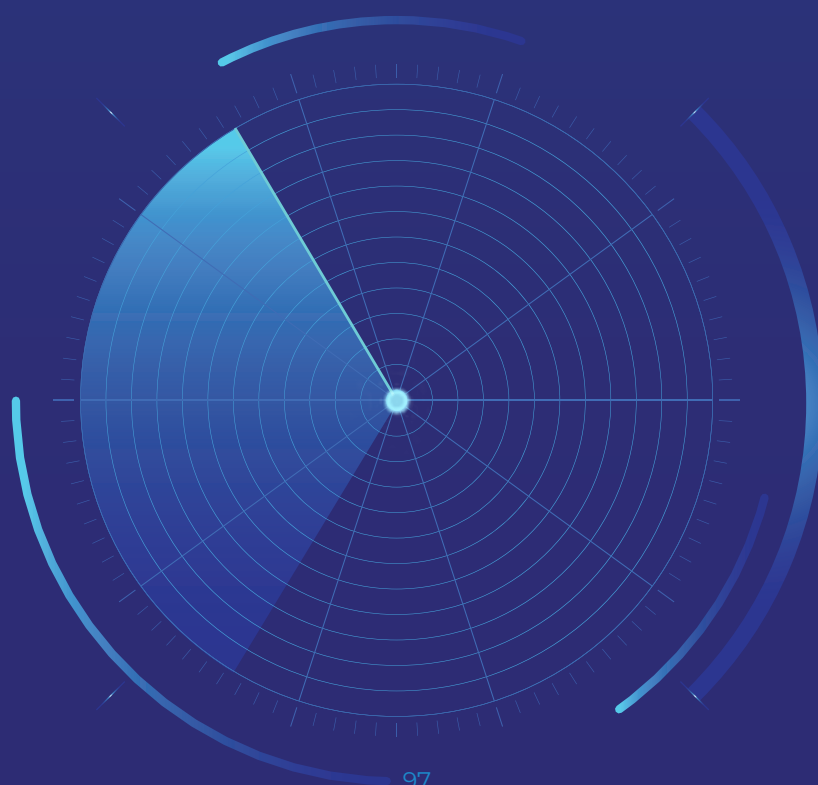






#05

# Legal regulations



# #05

## Legal regulations

### 5.1. What legal form of the company to choose.

The legal framework in which startups operate has a major impact on their day-to-day operations. Much depends on the phase of development of the startup and choosing the optimal path is by no means an easy decision. This is because each type of business involves slightly different opportunities, but also obligations, whether in terms of legislation or tax issues.

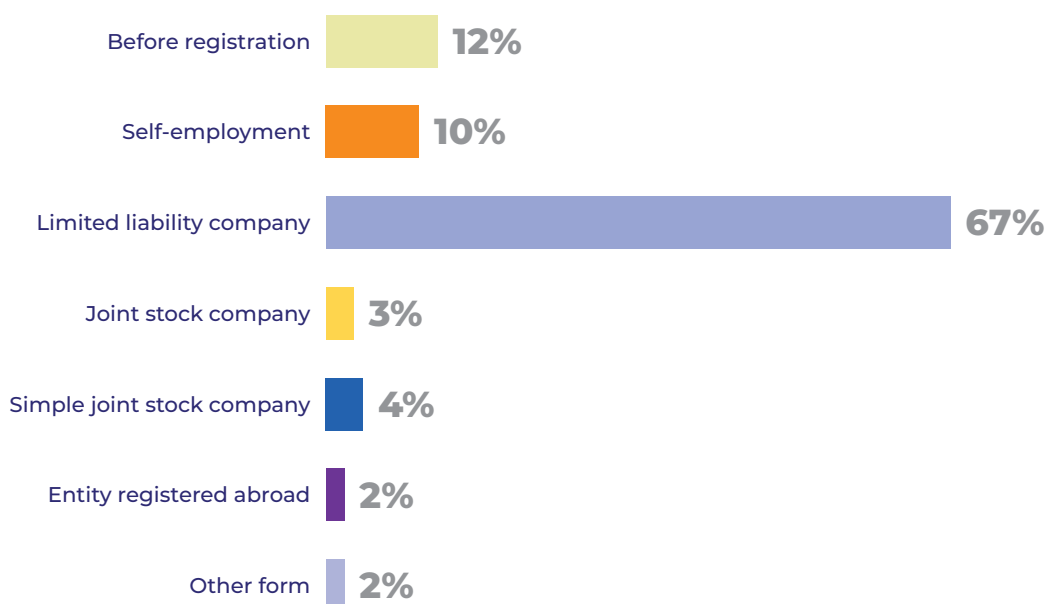
Every fifth startup participating in this year's Startup Poland Foundation survey is yet to register its business. Therefore, a large proportion of them, 12 per cent for the time being, are rather moving in the area of planning, conceptual thinking, and market research and not focusing on business activity. Since the startup is not making money for now, there is also no need to officially register it. On the other hand, a small percentage of the respondents are entities registered abroad (2 per cent), so their legal status is independent of Polish regulations.

Each survey confirms that by far the most common form of business chosen by Polish startups is a limited liability company - this legal form was declared by two out of three surveyed entities (67 per cent). What is the reason for the popularity of this particular solution? A limited liability company is relatively easy to set up and does not require large share capital. What distinguishes this form from, for example, self-employment, is the fact that in the event of problems, the owners of the company do not risk their own assets. In the case of business results that are quite difficult to predict and a certain risk that is even inherent in the very essence of a startup, this seems to many founders to be the most favourable choice. However, there is also a considerable group of startups operating in the form of self-employment, which was mentioned by one in ten of those asked.

Joint stock companies are a far less popular choice, with only 3 per cent of the respondents opting for such a move. It should be noted, however, that a further 4 per cent are companies established as a simple joint stock company (PSA). A traditionally understood joint stock company, on the one hand, makes it easier for a startup to operate in many areas (e.g. in the context of the ESOP programme already mentioned in this report), but requires much more expenditure at the start - the share capital in such a case must be at least PLN 100,000. For a startup, this sum is likely to be unattainable, which is why the majority of startups only change from a limited liability company to a joint stock company at a later stage – after successive funding rounds – which in turn opens the way to a possible IPO.

The introduction of the so-called simple joint stock company (2 July 2021), suggested by the startup community, is an attempt to increase founders' interest in companies – here the share capital is limited to just one symbolic zloty. On top of this, there is a more flexible structure to the company's bodies (a board of directors instead of management and supervisory boards) and it is possible to adopt solutions and simplifications remotely and simplifications – both in terms of establishment and possible liquidation of the company. Despite this, a simple joint stock company has not been particularly popular so far and has not matched the hopes placed in this solution. What could be the reason for this? It seems that many founders are apprehensive about betting on new solutions that have not yet been well explored, feeling safer in the established formula. Some advisers have also warned founders that potential investors may look less favourably on startups operating as joint stock companies. Perhaps it will still take time for this type of company to embed itself in the public consciousness, and in the years to come, those distrustful of this solution will also become convinced of its advantages.

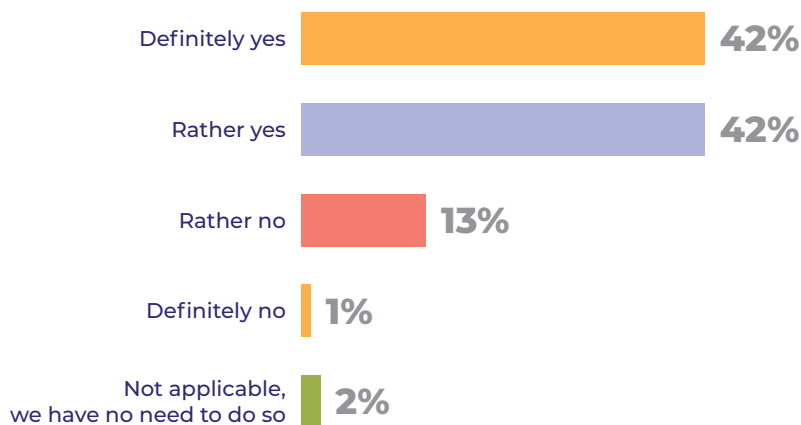
#### What is the legal form of your startup?



## 5.2. Sources of knowledge about the law and approaches to legislative changes

Polish startups, even after registration, keep their finger on the pulse when it comes to legislative changes - whether on the domestic or EU market. An overwhelming majority of the respondents (84 per cent) monitor legal changes, of which exactly half (42 per cent) chose the answer 'definitely yes' and the other half 'rather yes'. Only 14 per cent of the respondents do not keep abreast of changes in the law, with a further 2 per cent indicating that they see no need to do so.

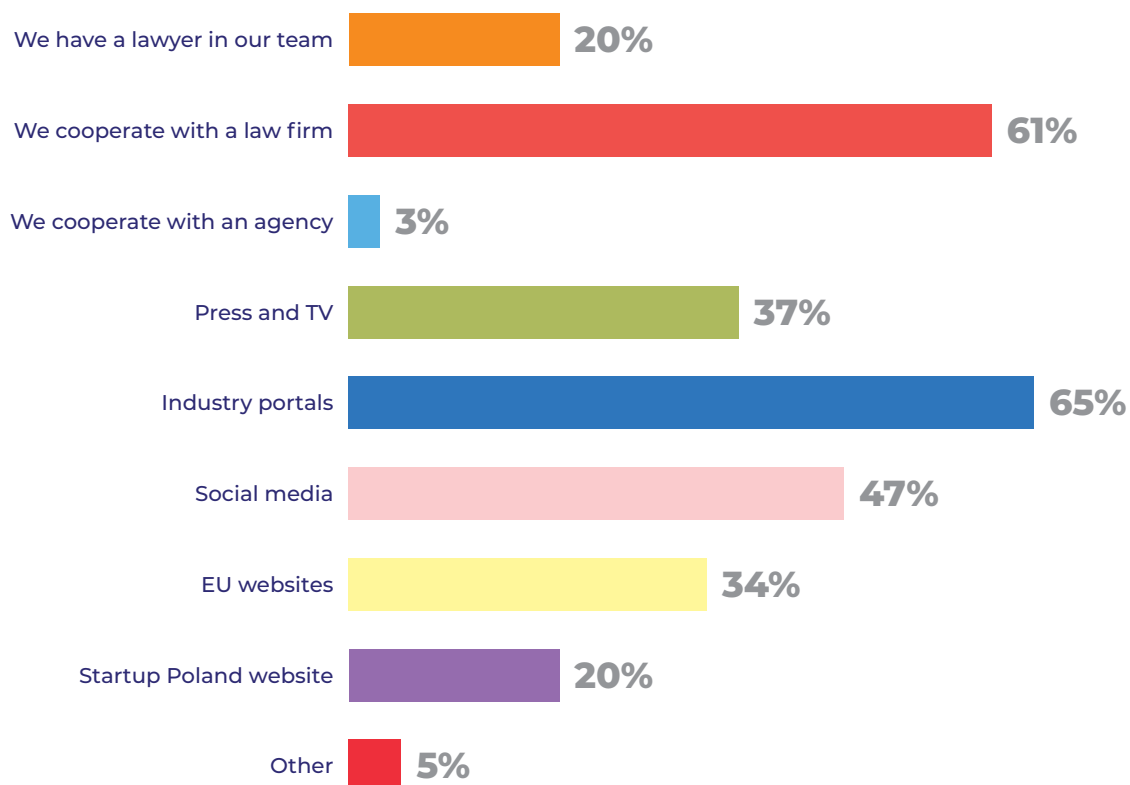
Do you monitor legislative changes on the Polish and EU market?



The main sources of information about legal changes for startup founders are industry portals, with content published there reaching 65 per cent of the respondents. Articles from the press and TV programmes are a source of information about changes in the law for 37 per cent of the respondents and social media for 47 per cent. One in three startups (34 per cent) obtains their information directly from official EU websites, while one in five visits the website of the Startup Poland Foundation (20 per cent) to monitor changes in the law affecting them.

When it comes to legal support, the majority of startups use a law firm to inform founders about newly introduced regulations and the obligations arising from them (61 per cent). Far fewer (20 per cent) startups employ a lawyer as a team member. An additional 3 per cent declare that they get information about legal changes from the agency they work with.

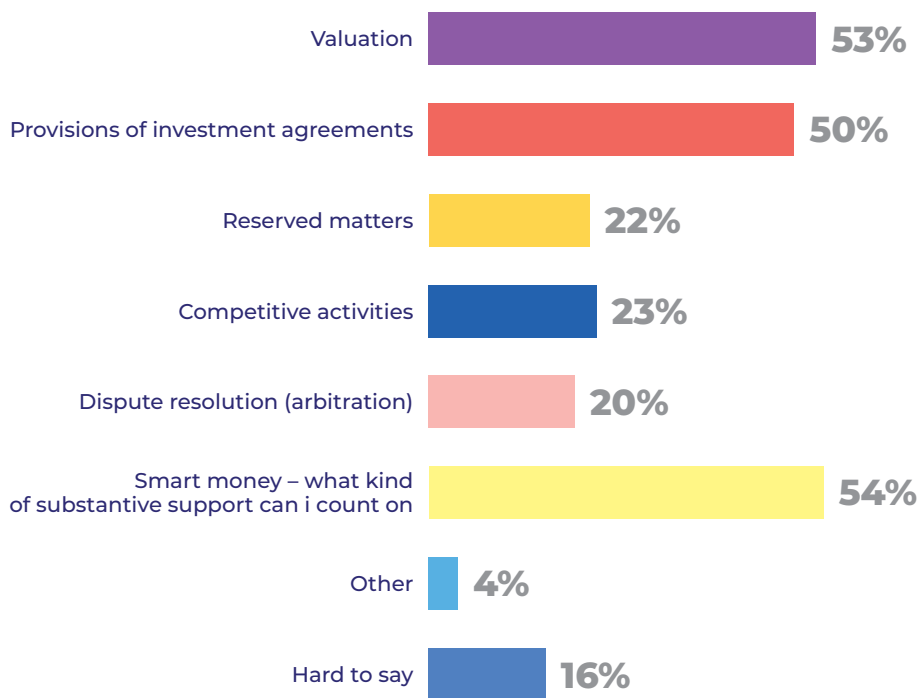
### What sources do you use to monitor changes in the law that could potentially affect you?



The Foundation's survey also asked startups to indicate in which areas they would like to broaden their knowledge when it comes to cooperation with VC funds. The largest percentage (54 per cent) indicated support in terms of smart money – i.e. not only raising capital for development, but also substantive, practical support for business development and making contacts available. An almost identical percentage of the respondents indicated the need to expand knowledge related to valuation (53 per cent) and 50 per cent on the provisions of investment agreements.

Broadening knowledge of competitors' activities was less frequently indicated (23 per cent) as was reversed matters (22 per cent), i.e. making decisions concerning the company where investor approval is required. One in five respondents (20 per cent) would like to learn more about arbitration processes (resolving business disputes).

In which areas would you like to learn more when it comes to cooperation with VC funds?





# People – the largest barrier to running a startup

Access to talent, convincing them that it's worth joining a startup – choosing a risky venture over a more stable job in a large corporation – this has been one of the major challenges faced by startup founders for years. It's especially difficult at the beginning, when we don't yet have a 'product-market fit' and the chances of finding it and then getting a slice of the market are not high.

What can be of help for us here from the very beginning? Certainly offering shares or share options (ESOP programme). This makes the employee/manager joining feel that he or she is working not only for the success of the company, but also his or her own as a co-owner. In mature markets, particularly in the US, the practice of ESOPs is very common, and in our country there are already job advertisements in startups with explicitly stated conditions for taking up shares.

The second element worth taking care of is building an attractive organisational culture based on trust, openness and agency. Building an environment where every person's work matters. Small, agile startup teams have a big advantage over medium-sized companies and corporations in this respect and can thus attract people who value the opportunity to be proactive without many procedural constraints.



The third element is the effective communication of opportunities for rapid development (and promotion) as the organisation grows (which is actually inherent in the very definition of a startup).

Ultimately, it is also much easier with a secured source of funding (and, of course, an innovative product that solves a real problem). On the other hand, a good, experienced team with a good product also has the best chance of convincing investors. Therefore, every element of this triad must be kept in mind and the other challenges will become irrelevant.

Finally, I recommend the words of Ernest Shackleton – the famous English polar explorer who, when recruiting people for a new expedition, used the words in a short press announcement: *“Men wanted for hazardous journey, small wages, bitter cold, long months of complete darkness, constant danger, safe return doubtful, HONOUR AND RECOGNITION IN CASE OF SUCCESS”*.

I warmly wish all startups this very success!

**Grzegorz Borowski**  
Co-Founder & CEO  
Infoshare

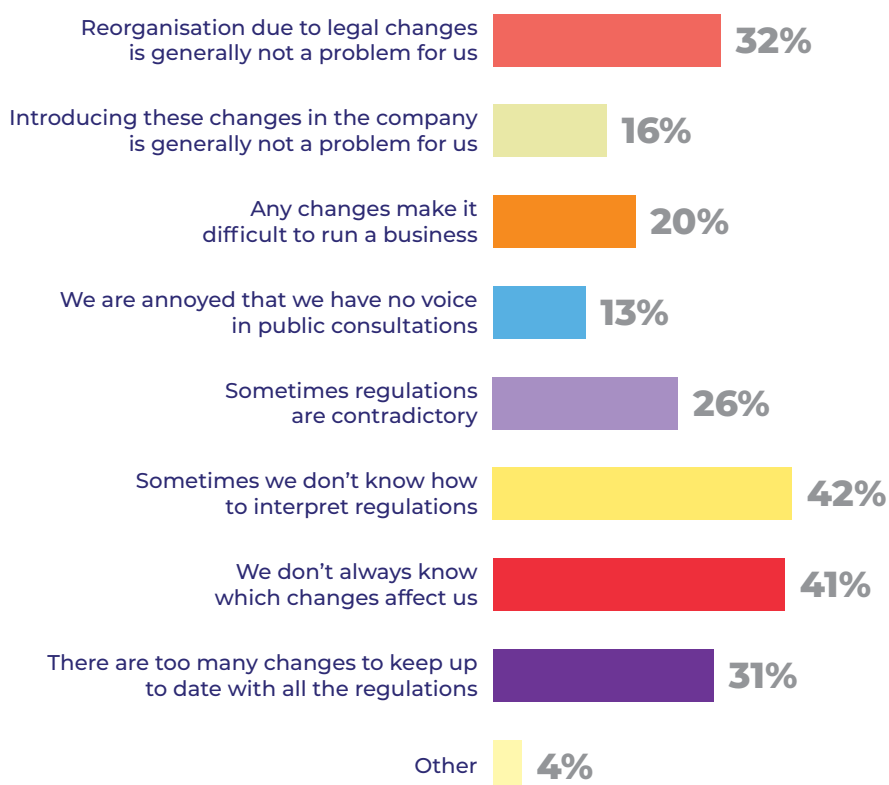


### 5.3. Tax changes and the operation of startups

The answers to the next question posed to startups in the survey show that for the majority of domestic startups, dynamically changing laws, whether on a European or national level, are a real problem in day-to-day business operations and evoke negative emotions. Although one in three startups declares that reorganisation related to changes in the law is not a major problem (32 per cent) and 16 per cent that implementing these changes in the company is not troublesome for them, at the same time, negative opinions about legal changes prevail among the respondents. For 42 per cent of the startups, legal changes are sometimes a problem, as they often do not know how to interpret them correctly, and an almost identical percentage (41 per cent) do not know which changes affect them. Almost one in three (31 per cent) declares that there are too many changes for them to keep up and stay up to date with.

More than one in four startups indicate that regulations are sometimes contradictory (26 per cent). A more unequivocally negative opinion was expressed by 20 per cent of the respondents - in their opinion, all changes make it difficult to run a business. A similar, albeit somewhat mitigated, opinion is declared by 16 per cent of the respondents. For this group, making changes in the company is troublesome. It is also worth noting that 13 per cent of the startups feel irritated because, in their opinion, their voice is not heard in public consultations – ergo, the voices of the startup community do not penetrate the consciousness of decision-makers or are rejected by them.

#### How do you perceive the dynamically changing law at European and national level in your startup?



Tax issues are no less important than legal aspects. Only 31 per cent refer to them neutrally, declaring that they have no impact on their business. The remaining opinions are decidedly negative and the percentage for individual answers is fairly evenly distributed. One in three startups (33 per cent) believes that tax changes destabilise their business and force them to modify their existing plans. Such changes, for 30 per cent of those asked, mean increased costs, as they have to specifically hire experts to process the changes forced by decision-makers. More than one in five startups complain that tax changes prevent them from planning their business because they do not know when and what further changes will be implemented.

Some respondents also point out that tax changes have an impact on employment in the company. Almost one in four believes that they are forcing a change in the form of employment of staff and nine per cent that they are making it more difficult to attract talent from abroad.

#### How do tax changes affect your business?





# Regulatory stability: The bedrock of a healthy startup ecosystem

Entrepreneurship is by definition a highly risky and uncertain venture. Markets could crash, the COO could quit, there could be a lack of market fit, strong competition, or lack of funding. In this very high-risk environment, regulation should not be a risk factor. It should be the predictable and stable foundation in which startups can thrive.

Entrepreneurial opportunities are very dependent on the legal and regulatory framework in which they operate. It's not a coincidence that some countries and jurisdictions are known to be startup breeders. If we take a closer look at these countries, we will almost certainly come across a regulatory environment that is not only stable but startup-friendly. Take Estonia for instance, often cited as a country that has leveraged regulatory stability and startup creation. Estonia's advanced digital governance infrastructure, e-residency programme, and consistent and corporate flat income tax rate have played a significant role in its emergence as a hub for startups.

We're currently going through a period of regulatory instability in the European Union. Over the last five years, startups in the EU have witnessed a regulatory avalanche of digital policy, disrupting regulatory stability at all levels. We have seen everything, including the regulation of online platforms and services, marketplaces, content moderation, data protection and privacy, competition, taxation of digital services, artificial intelligence, cybersecurity, and network security and deployments. For smaller players with inherently fewer resources this phenomenon can create a market entry barrier. When it doesn't, it creates confusion as they clash and overlap with one another, making it impossible for entrepreneurs to comply. This form of asymmetric regulation disrupts the value chain and undermines competitiveness.

This regulatory avalanche will affect existing startups, who built their ventures trusting a different, less burdensome, regulatory framework. Perhaps more worryingly, we can't help but ask ourselves about the long-term effects this regulatory avalanche will have on the wider ecosystem. In the short term, regulatory complexity disincentivises companies from scaling and if continued for years, startup ecosystems will face regulatory hostility, discouraging any form of business creation.

With the European elections around the corner, incoming and sitting policymakers should ask themselves: "Will this law, or this set of laws, bolster innovation and startup creation, or the opposite?" A harmonised, certain and simple legal framework will allow for startup entrepreneurs to use regulation as a launching pad.

**Inés Moreno-Alonso**

EU Director at  
Allied for Startups



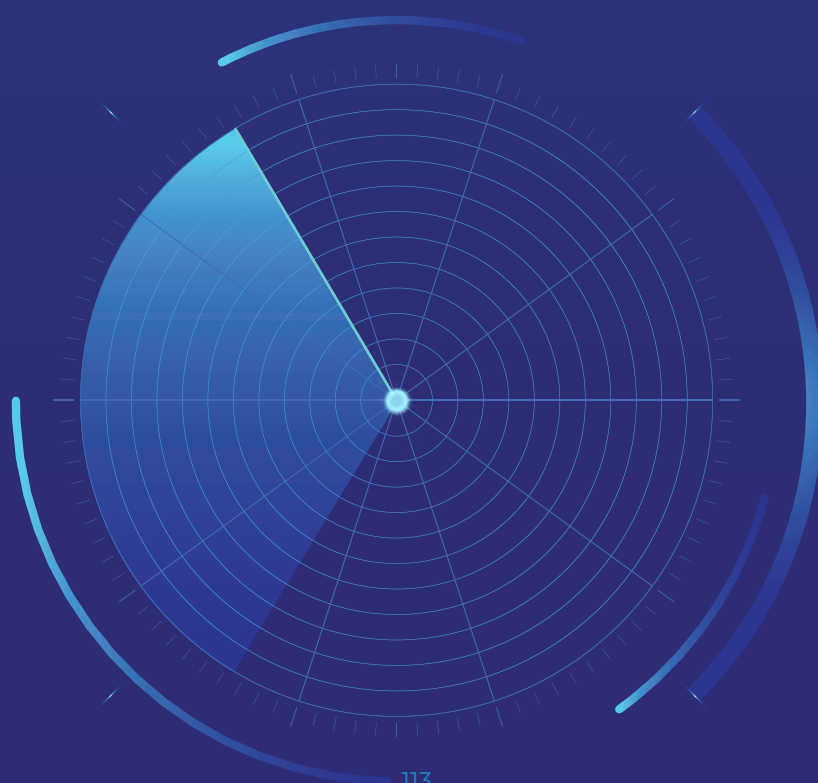






#06

# Favourable ecosystem



## #06

# Favourable ecosystem

### 6.1. Barriers – where they are and how to overcome them?

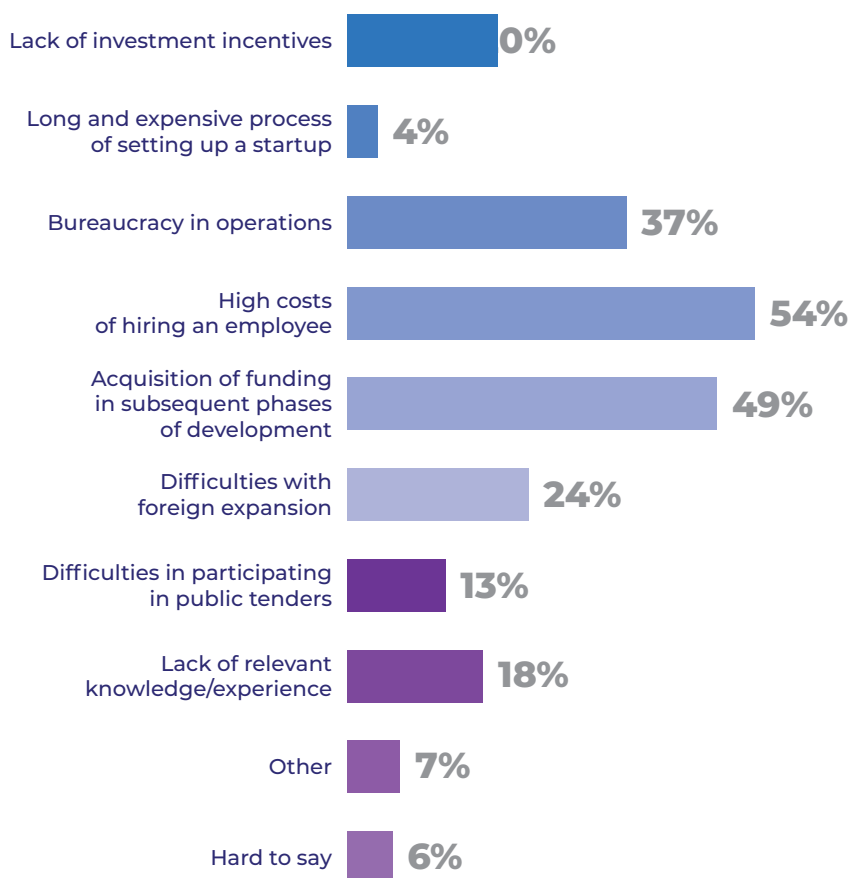
Founding a startup or going through the stages of its development is not easy. Especially now, when the boom in the market for technology companies is slowing down and investors are less and less willing to make this kind of commitment. As every year, the Startup Poland Foundation asked startups about the issues that bother them most in running their business. The key barrier has now become the cost of hiring an employee – this answer is indicated by the largest number of the respondents, 54 per cent. This should come as no surprise – in an era of persistently high inflation, wage pressures are increasing throughout the economy. It is no different in startups. On top of this, there are high and still rising social security contributions, including what is essentially a new tax – the non-deductible health contribution. The increase in hiring costs is thus a self-perpetuating mechanism.

The second most frequently mentioned barrier, mentioned by almost one in two startups (49 per cent), is the problem of raising funding in the later stages of development. As we wrote more extensively in chapter four of this report, investors around the world are far less willing to dip into their pockets than they were just two years ago. Admittedly, in previous years too, the startups surveyed complained about a lack of funding, but the situation is certainly much more difficult now.

Complaints about too much bureaucracy when running a startup are also not uncommon – this is a problem for 37 per cent of those surveyed. In addition, 4 per cent point to the overly long and costly process of setting up a startup, which to some extent is also linked to excessive bureaucracy.

For one in four startups, a significant barrier blocking their growth is the difficulty in expanding abroad (24 per cent) and one in five believes that Poland lacks investment incentives (20 per cent). Some of them (13 per cent) experience difficulties in participating in public tenders. The lack of adequate knowledge and experience is pointed out by 18 per cent of them.

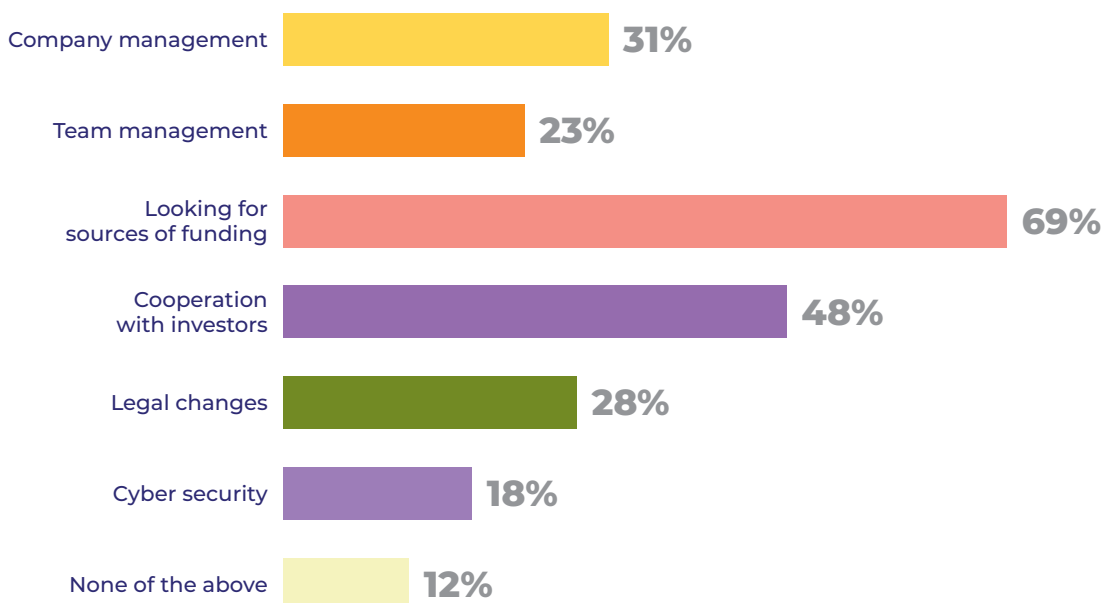
## What barriers to startup operation do you find most difficult to overcome?



Identifying barriers is important, but it does not in itself solve problems. The Startup Poland Foundation's survey therefore asked what areas startups need support in. And here again, funding issues come to the forefront. As many as 69 per cent of the respondents would expect support in the area of finding sources of funding and almost half (48 per cent) in the area of cooperation with investors.

Help with business management would be useful for 31 per cent of the startups and with team management for 23 per cent. Guidance in adapting to required legal changes would be important to 28 per cent of the respondents. Cyber security issues require support according to 18 per cent of those asked.

In which areas of your startup's operations do you need support?



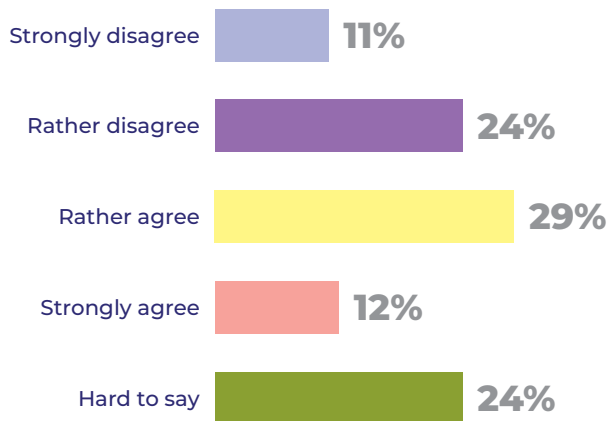
## 6.2. Standardisation of investor – startup cooperation

Standardisation of cooperation between companies and investors is one of the key demands of the broader startup community in Poland. This issue relates primarily to legislative changes concerning startups, but not only. It is also important to develop the best possible standards in relations between founders and VCs and business angels.

It was for this purpose that the Startup Poland Foundation established the Startup Poland Portal in February 2023, which has become a platform for the exchange of experiences, demands and good practices between experts and participants in the startup ecosystem. Young innovative companies can find educational materials suitable for each stage of cooperation with an investor – before, during an investment and after an exit.

This year's survey shows that there is a need in many startups to standardise cooperation with investors. 41 per cent of those questioned agree with this statement, including 12 per cent who feel strongly about it. The opposite opinion is expressed by 35 per cent of the survey participants, including 11 per cent who strongly see no such need.

Do you think cooperation between investors and startups should be standardised?



Especially now, when the startup sector has significantly slowed down and it is becoming more difficult for young Polish companies to compete for investors' attention or expand into foreign markets, such organisation and unification of activities seems crucial. Development of a good strategy to attract investors and, subsequently, smooth and symbiotic cooperation with them can determine the success of a startup. The importance of this problem is demonstrated by the interest in the problem of standards in this sector and the involvement of entities such as Google for Startups, PFR Ventures, NCBR and Sebastian Kulczyk's InCredibles.



# What do young companies in Poland need in order to thrive?

If we want to be home to companies that can compete confidently on the international market, access to finance should be equally competitive. The situation on the financial markets and the ongoing war in Ukraine are not conducive to obtaining financing among foreign entities and it is especially difficult for companies in the early stages of development. Meanwhile, domestic money is mostly not founder-friendly. This is partly a matter of investor's mentality from this part of the world and partly a matter of regulation.

Mobilising money that could accelerate the development of young companies and increase their chances of competing with global players, in my opinion, requires both systemic and mental changes. By systemic incentives, I mean tax breaks/bonuses for funds and business angels, which is how it works on most developed markets. These tools reduce the fear of investment by partially reducing the risk of such investments, which – let's not kid ourselves – is really high.

On the other hand, when it comes to mental change, the road to overcome is harder, because it means levelling out the mentality of domestic and 'Western' investors. Polish companies have access to much more expensive money in their home country, both literally and figuratively. Firstly, the lion's share of investors get their tonsils colonoscoped before they even meet for the first time, and secondly, after a very long, drawn-out process, the company offers investments for a lot more equity than investors from Western Europe or the United States.

I am a great believer in public ostracism. We should be loudly sharing extremely unfriendly investor behaviour for two reasons. On the one hand, it is incumbent on those who have already been in this bubble for some time to educate new startups who are just getting to know this market. On the other hand, I believe that only the inevitability of punishment, not the amount of punishment, is effective in warning against undesirable behaviour – so I am convinced that this would very quickly reduce the scale of anti-founder behaviour among investors. It's only talked about behind the scenes now, mostly for fear of becoming an “industry troublemaker” – or troublemaker because women, whose presence on teams of founding teams is not some crushing trend, it is easier to pin this label on them.

For the record – I love my investors. Out of almost 30 fund representatives and angels, only one has gone exceptionally wrong for me and I really wish someone had warned me about him three years ago;)

**Dorota Rymaszewska**  
Founder & CEO  
HiPets





# Polish start-ups' attitude to dynamically changing legal regulations

The attitude of Polish startups to dynamically changing legal regulations is negative, and this assessment has been unchanged for years. This is hardly surprising, as regulatory stability and the ability to operate under worked-out rules determines the comfort of doing business. As a general rule, investment plans – whether for large companies or startups – have a time horizon of several years and are difficult to implement in the face of the risk that regulations on taxes, business or a particular industry will change in the course of, say, a month.

The excessive dynamics of legal changes, especially those prepared without the participation of startup representatives and introduced quickly without the opportunity to prepare for them, means a lack of regulatory stability, which has wide-ranging economic consequences. Indeed, regulatory stability determines the investment attractiveness of a country. In addition, for startups, regulatory stability is doubly important: it is not only a factor that guarantees the smooth running of business in Poland, but also influences the presence in Poland of corporations and investment funds that finance the activities of startups at various stages of development. It is therefore safe to say that the attitude of Polish start-ups to dynamically changing legal regulations is doubly negative. It is also worth remembering that frequent changes in regulations generate additional costs related to their monitoring and assessment of their application in practice, which are felt more by young technology companies than large corporations.

Startups need and call for regulatory stability, as this year's survey confirms.

The fact that regulatory changes are important to startups is evidenced by the fact that almost half of those surveyed monitor the law. As many as 61 per cent of those surveyed use the cooperation of a law firm in this regard, which increases the aforementioned operational costs of doing business.

The startup's perception of dynamically changing laws is that, for 42 per cent of the respondents, they do not know how to interpret the regulations, for 41 per cent they do not know which of the changed regulations apply to their businesses and, according to 31 per cent of the respondents, there are too many changes to keep up to date with them. According to 26 per cent of the respondents, the regulations introduced are often contradictory, and 13 per cent expressed reservations about not participating in public consultations. The low merit of new regulations (their contradictory nature, lack of clarity as to what their scope is, etc.) raised by startups is primarily the result of the lack of participation of innovative technology entrepreneurs in the lawmaking process. The lack of public consultations or the short time for startups to provide their opinions on draft legislation, which are rarely taken into account in the final wording of the regulation, results in the law often being inadequate to the needs of entrepreneurs and does not reflect the dynamics of technological change, and yet it is startups that have the expertise to be taken into account when creating regulations.

The effect of legislative dynamics in the tax area surveyed is: making it more difficult to attract talent from abroad (9 per cent of the respondents) as a result of the New Polish Order in several iterations; increasing operating costs due to the need to hire additional experts (30 per cent of the respondents); destabilising business (33 per cent of respondents) or the need to change business plans (33 per cent of the respondents).

The Startup Poland Foundation has repeatedly stressed that a startup's apparent dissatisfaction with the legal environment may result in the closure of operations, limited business growth or the relocation of the company to another country.

This year's results of the survey on legal changes confirming the negative attitude of startups to dynamically changing legal regulations are a kind of appeal from the startup community to the ministers newly appointed after this year's parliamentary elections. The conclusion is simple – if Poland wants to keep its startups on the market and encourage foreign startups to operate on its territory, the laws should be more predictable, simpler and more stable, and created with the participation of business representatives, especially startups.

**Marta Pawlak**  
head of public policy  
Startup Poland

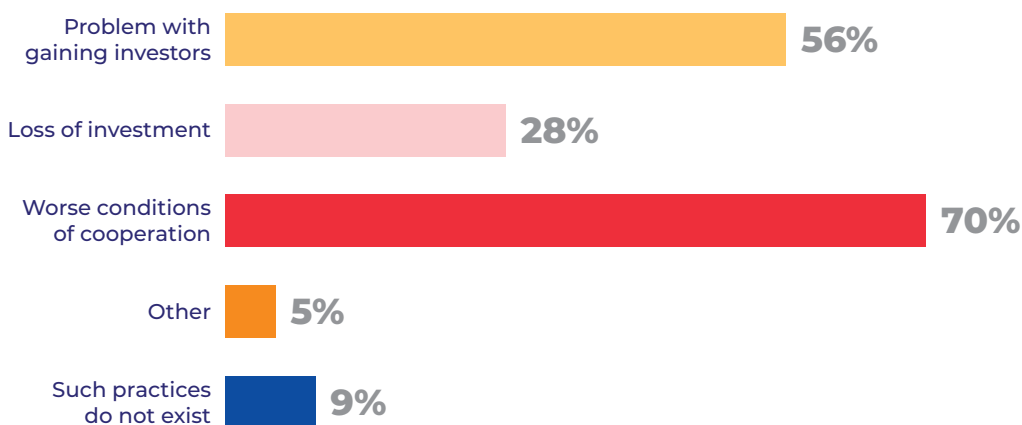


### 6.3. Ignorance of market practices harms you

Ignorantia iuris nocet (Latin: ignorance of the law harms you) – this Latin phrase is one of the basic legal principles, derived from Roman law, meaning that you cannot hide behind ignorance of a legal norm. To some extent, it also applies to the startup sector, where legislative changes are often a significant problem for the day-to-day operation of young companies on the market (see chapter five of this report for more). Lack of knowledge of legal norms obviously leads to non-compliance with them. The same is true of good market practices (often based on legal solutions).

The startups participating in the survey were asked to indicate what, in their opinion, are the consequences of not knowing, and therefore not adhering to, commonly functioning market best practices. The vast majority (70 per cent) are of the opinion that a lack of such knowledge translates directly into worse conditions for cooperation (implicitly between a startup and an investor). The problem of finding an investor is indicated by more than one in two respondents (56 per cent). Loss of investment, on the other hand, is a possible scenario for 28 per cent of the startups. Only 9 per cent of the respondents believe that such good practices simply do not exist – that is, they are de facto not binding.

What, in your opinion, are the consequences of not knowing, and therefore not following, commonly functioning market best practices?



### 6.4. The good and bad sides of the investor – startup relationship

Every business partnership has its better and worse moments. It is no different for startups and investors. Usually, it is the investor who has a certain advantage over the startup; after all, it is the investor who puts up the money. Of course, the extent of the investor's influence on the day-to-day operations of the company can vary greatly – some investors simply put up capital without getting involved. Others bring in their rules and enforce them with a firm hand. Between these two scenarios, we have a whole range of different cooperation models.

So what is it that most bothers founders when it comes to investor behaviour? Most often, startups complain about the lack of feedback after a meeting with an investor. This answer is indicated by almost one in two startups (45 per cent). This can actually be a problem for a startup looking for an investor – there is no feedback, so it is not clear what needs to be improved or changed for investors to be interested in continuing negotiations with the company.

An almost identical percentage of the respondents (44 per cent) criticise the fact that investors take advantage of the founder's ignorance. The lack of equality between the two partners can lead to abuse and the founder usually has a much weaker bargaining position here. To some extent, this is linked to another problem mentioned in the survey – 42 per cent of the startup founders are most offended by an investor's overly aggressive policy regarding the terms of their cooperation.

Tough negotiations are natural, but they require some compromise between partners. One in five startups (21 per cent) has a very negative perception of situations where the investor does not give room for any negotiations. Amongst the bad behavioural problems of investors they have dealt with, the founders also mention a lack of control over the flow of information about projects their company is implementing (17 per cent).

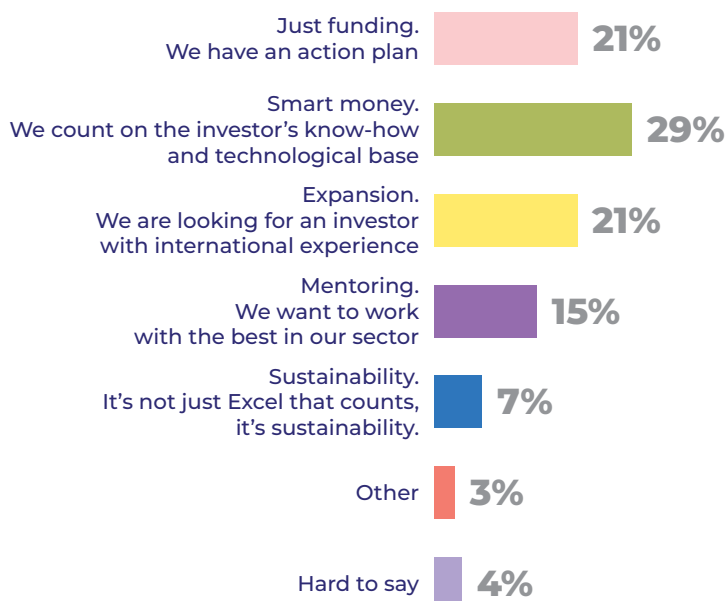
#### What types of bad behaviour by investors offends you most?



The search for the right investor is quite a challenge. At different stages of development, startups have a variety of goals in this process – not just raising capital alone. Just 21 per cent of the startups are only looking for funding because they want to pursue their own action plan. Among the startups surveyed, however, the largest proportion (29 per cent) declares that they care most about so-called smart money – where, in addition to the funding itself, the company counts on the investor's know-how and technological base. Another 21 per cent have plans to expand and are therefore looking for an investor with international experience.

Mentoring is also an important investor feature expected by the founders. For 15 per cent of the startups, it is important that cooperation means working with the best in the sector. Others point to so-called sustainability (balance). In their view, it is not only Excel but also sustainability that matters in cooperation with investors. This is the answer given by 7 per cent of the respondents.

### What do you care most about when looking for an investor?





# A VC fund should support startups not only with capital, but also with knowledge, experience and networking

Capital is an important factor in supporting startups, but transferred know-how, competence and contacts are often the key value for the development of innovative companies. Having worked closely with Polish startups for many years now, I notice that there is still a lack of VC funds on the market that will not only provide young businesses with the capital they need, but also lead to them becoming actively involved in their development. Nevertheless, it is important that this help is valuable.

Vinod Khosla, founder of Khosla Ventures, stated in an interview that as many as 95% of VC funds do not provide any added value to startups and 70% even have a negative impact on these businesses. The famous investor says that giving advice to startups should be reserved only for those VC representatives who have followed the path of running their own startup. Only such investors are able to understand and give good advice to entrepreneurs who face unusual business challenges on a daily basis.

In the context of the Polish startup ecosystem, where the dynamics of company development also depends on proper advice to startup founders who often face completely new business challenges due to historical economic conditions, such advice takes on a whole new dimension. Capital is only the beginning – the key to success is the synergy of knowledge, experience and networking

**Aleksandra Baka**  
Head of Competence Hubs  
Marketing Manager  
AIP Seed



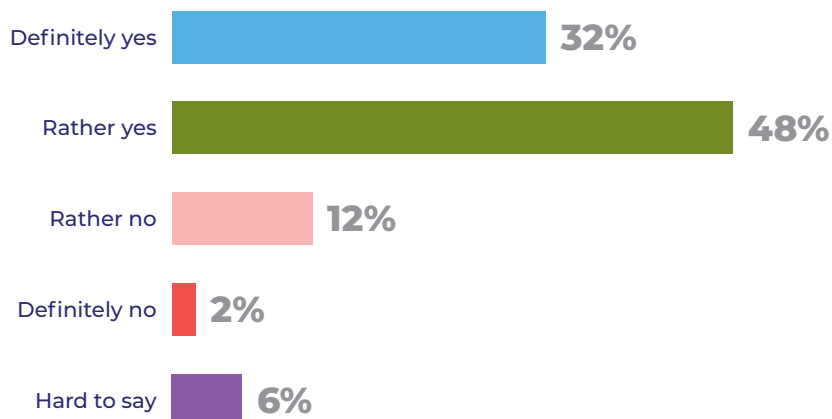
## 6.5. Focus on security

Figures from Cybersecurity Ventures cited by Embroker.com show that the fight against cybercrime represents an incurred cost to the global market of approximately USD 10.5 billion per year by 2025. These figures are gradually increasing – as recently as 2015, the cost of fighting cyber threats was ‘only’ USD 3 billion.

Experts on this subject agree that the of cyber attacks on companies is increasing exponentially, especially on small and medium-sized companies (including startups). Attacks are not only more frequent, but also more sophisticated and more effective. Accenture's data shows that as many as 43 per cent of cyber attacks target smaller companies and only 14 per cent of them are able to defend themselves against them. The consequences of such incidents can linger long after they have occurred. For a company, this means not only direct financial losses, but also possible legal liability and a damaged image, e.g. among existing or future customers.

This is a global problem and therefore also present on our market. The survey by the Startup Poland Foundation shows that the majority of startups have security measures against cyber attacks, although only one in three declares them to be definitely effective (32 per cent) and the majority – 48 per cent – believe that their security measures generally allow them to avoid attacks. Only (or as many as) 14 per cent of the respondents declare that they do not have adequate security measures in place – including 2 per cent who believe that they are definitely not prepared for a potential cyber attack.

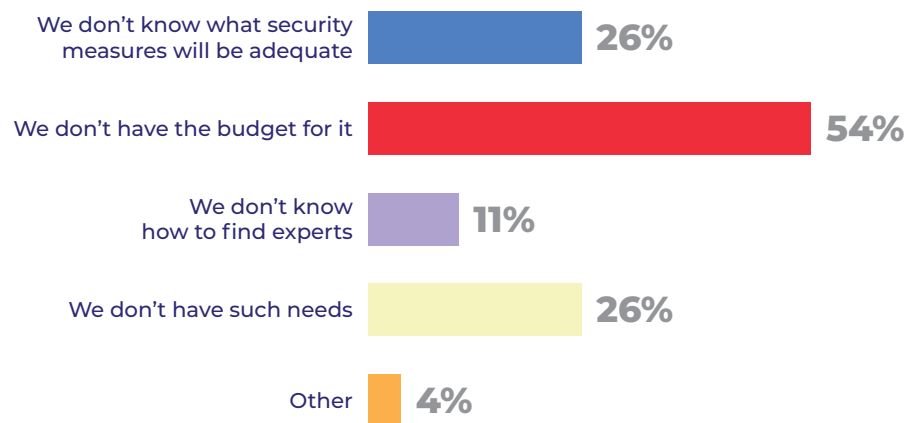
Do you have adequate security measures to avoid potential cyber attacks?





However, implementing adequate security measures is neither easy nor cheap. As many as 53 per cent of the startups do not have a high enough budget to implement the right tools to protect them against an attack. One in four does not know what security measures are appropriate for them. More than one in ten respondents have problems finding experts in this field who can support them against cyber attacks (11 per cent).

### What barriers do you see to implementing adequate security measures?



However, there is a large group of companies declaring that they have no such needs (26 per cent). At this point, the question may arise: do these needs really not exist or do the respondents simply not realise that literally anyone can become a victim of some type of cyber attack..



# Are Polish companies safe?

There is probably not a single cyber security report that does not indicate an increasing number of cyber attacks. Sometimes there is a short-term stabilisation, which can lead managers to conclude that the risk is relatively low. However, in the long term, we tend to see cybercriminals' methods evolving into increasingly sophisticated ones, leading to successive cycles of attacks on companies. The consequences? Negative impact on customers, financial and reputational consequences through to legal and regulatory implications.

## How do Polish companies approach the issue of cyber security?

It is not surprising that it depends on the individual approach of the specific company and the environment in which it operates. Based on many years of experience with clients, I see that the approach to this issue most often results from:

- the size of the organisation in question, the nature of its operations and its risk profile. This determines the extent to which core business processes depend on technology and how vulnerable they are to various types of cyber attacks;
- the regulations and legal requirements in which it provides its services or products.

Here we can refer to the GDPR, but also the requirements of the FSA, the NIS2/DORA directive referring to critical infrastructure;

- management's awareness of the threats and their potential impact on business continuity, as well as treating cyber security as a strategic business risk that needs to be managed continuously and not point-by-point, which is often attempted to be covered by "checking" pentests once in a while for the sake of peace of mind (unfortunately, often by the time an attack has already happened and the consequences, often painful, need to be mitigated);

- their exposure to cyber threats – a company that provides its main services via the internet – e.g. e-commerce – will have a different risk profile from a company that has a production line;
- the maturity of the company – which determines what tools and solutions it can adopt in terms of technology and operations.

The need for security can therefore be driven by a number of factors. In a particular case, it may be the reliance on processing large amounts of personal data in IT systems and the associated regulatory penalties for failing to take due care in securing that data. The mere fact of having the data is not key, but rather that, for example, the company will be using IT systems to control a production line or support logistics operations (e.g. a system that processes management information). Such a company should consider scenarios for an attack on such a system and understand the potential consequences if these elements are not operational for a certain period of time, because, for example, during an attack, hackers will block access to these systems (which in practice means stopping business operations).

Startups (but also many mature companies that have embarked on a path of rapid growth or transformation) very often focus on the processes of selling and producing a product or service. Cyber security for startups at an early stage is often less important – as the impact of a potential attack is small and the risk of a cyber attack or incident is acceptable.

This changes, however, as the product develops, although it may become necessary to secure the organisation outside of the regulatory and legal requirements of the target market – e.g. due to increased exposure of the product and the interest of criminal groups in the technology and data, which translates into an apparent increase in attacks targeting the organisation and its employees). In yet another case, it may be the need to demonstrate basic hygiene to customers or business partners to reassure them that a service or product will be resilient to a cyber-attack (which will inevitably happen at some point), so that the potential impact of the materialisation of such an attack will have minimal impact on counterparties. With this level of maturity, counterparties may ask for evidence of compliance with specific market standards for cyber security (SOC2, ISO, NIST, etc.).

The main issues facing organisations (especially smaller or ‘unregulated’ ones) in adopting security measures are:

- lack of awareness of cyber security and its role in business processes – treating the problem as a topic for IT staff (a technological problem often reduced to a penetration test performed once a year);
- lack of resources to execute the adopted strategy – often the company has no internal knowledge on the subject, so it relies on the IT supplier to determine the needs, which reduces the cyber problem to the installation of workstation security;

- and, finally, the lack of adequate budget and knowledge to establish the basic elements of cyber security protection adequate to the life stage, maturity and exposure of the organisation to threats.

These problems mean that we often have a one-off approach to cyber-security (after an incident, a window of interest in the topic opens, but only for a while, as we immediately return to 'normality'). Because of this, the topic of cyber security is reduced to a one-off penetration test or the production of a pile of documents and procedures to fulfil the requirements of compliance with a certain standard. I probably do not need to convince you that this approach does not provide continuous protection, but is just a way to be able to present anything as proof that "after all, we have protection against cyber attacks".

For young companies and business projects, it is worth recommending reference to basic hygiene standards in this area (an example would be the [www.cisecurity.org/](http://www.cisecurity.org/) approach). Designate a person (s) who can inventory the resources you have and identify methods and safeguards, implement and monitor them (e.g. cloud resources, web application, end stations). An absolute minimum is to use confidentiality agreements and clauses, to take care of the product in terms of proper architecture (security, work by design), and to secure one's product: scanning the code for known vulnerabilities (and patching them up), "upgrading" the versions of libraries on which one's product depends, or, for example, enforcing multi-component authentication in connections to the code repository, the cloud and other solutions. Other good practices include taking care of data access permissions, such as deleting ex-employee accounts or securing data when sharing it (e.g. with investors or other partners).

**Marcin Ludwiszewski**

Leader and Cyber Security Expert,  
Co-founder 1Strike.io





# **We are convinced that startups are the future of the Polish capital market**

This year, the WSE Group adopted a new strategy for 2023-2027, which provides for further implementation of projects affecting the Polish startup ecosystem. The new document only confirms that the Warsaw Stock Exchange is convinced that startups are the future of the Polish capital market. Just two months ago, we organised the biggest event in the Exchange's history in the area of the startup ecosystem – the WSE Venture Network Day. The event was attended by more than 1,000 people, including more than 20 accelerators, 40 VC funds, 50 business angels, 260 representatives of startups, 247 representatives of business, in particular representatives of WSE Issuers, and these are just selected numbers which confirm that cooperation with the startup ecosystem is a good direction taken by the management board of our company in recent years. The WSE Venture Network Day became the official ambassador event for the largest event of its kind in Europe – Viva Technology. On that day, we also announced the implementation of the WSE's new strategic project Venture Network, which aims to support startups in overcoming the barriers in front of them.

According to the latest survey conducted by the Startup Poland Foundation, Polish startups are definitely more likely to target large companies. The above positioning of startups, in my opinion, can also be seen in terms of the areas in which their representatives want to raise their competencies. Among startup employees taking advantage of training, the most popular were those in the areas of marketing and sales. The second area that caught my attention was the identification of barriers, and the biggest barriers faced by Polish startups are financing and cooperation with investors. Juxtaposing this with last year's study by the Startup Poland foundation entitled 'Luki w ekosystemie startupowym' (Gaps in the startup ecosystem), in which we jointly identified the four main barriers to development indicated by founders, i.e. raising funding, lack of access to cooperation with developed companies, lack of a networking network and insufficient opportunities for cooperation with experts, we have a very accurate overview of the situation on the Polish market and expectations in which areas startups need support.

As the authors note, investors around the world are far less willing to reach into their pockets than they were just two years ago. Therefore, at the current juncture, various forms of support for the sector are becoming even more important than before. In the context of these challenges, the Warsaw Stock Exchange is taking concrete steps to respond to the needs of the market. In the near future, the WSE's Venture Network initiative will expand our offer to reach companies at any stage of development, bringing together entities such as startups, accelerators, VC funds and business angels. We believe that our initiative will help harness the synergies that come from the collaboration of startups with leaders – key players in a given industry. We aim not only to support startups in achieving their financial goals, but also to create a space for networking and exchange of experience, which is important for the creation of new directions of development of the Polish ecosystem. Thanks to this approach, investors in the form of VC funds and business angels will be able to effectively support the development of projects that have been positively verified by the market, thereby increasing the chances of increasing the supply of the so-called 'unicorns' on the Polish capital market and of obtaining a higher return on their investments.

As I mentioned, we are implementing a number of projects affecting this sector of the economy, so I took the opportunity to ask Piotr Gębale – President of GPW Ventures – to share his opinion on the current situation in his area of activity. "After many months of preparation and analysis, the KOWR Ventures project – a joint venture between the WSE and KOWR – has been launched. The project complements the range of systemic support tools offered by the Ministry of Agriculture and Rural Development, focusing on innovative technological, product, process and marketing solutions operating in the broadly defined area of agriculture or in the agri-food sector. KOWR Ventures operates as a venture capital fund offering equity investments in SMEs with a so-called Polish element. Ultimately, it can supply dynamic companies that offer or will offer products, services, technologies or solutions for these sectors – with an emphasis on 'agricultural technology'. The project has been prepared taking into account the main challenges facing modern agriculture in the 21st century, based on the best



international standards and practices of the VC sector, by a team of managers with over 20 years of experience in VC/PE equity investments (responsible, among others, for building from scratch and managing the first VC fund in Poland and Central and Eastern Europe – National Capital Fund with assets of more than EUR 200 million).

In today's dynamic business environment, developing innovation and creating new solutions is becoming the key success factor. The Warsaw Stock Exchange is not only aware of this, but also works actively to support this process in Poland by collaborating with various players in the startup market. We aim to create innovative projects and shape the future of the market, while opening the door to anyone who wants to join our innovation ecosystem. Our goal is to create the future together, using the potential of openness to innovation.

**Ignacy Bobruk**

MBA

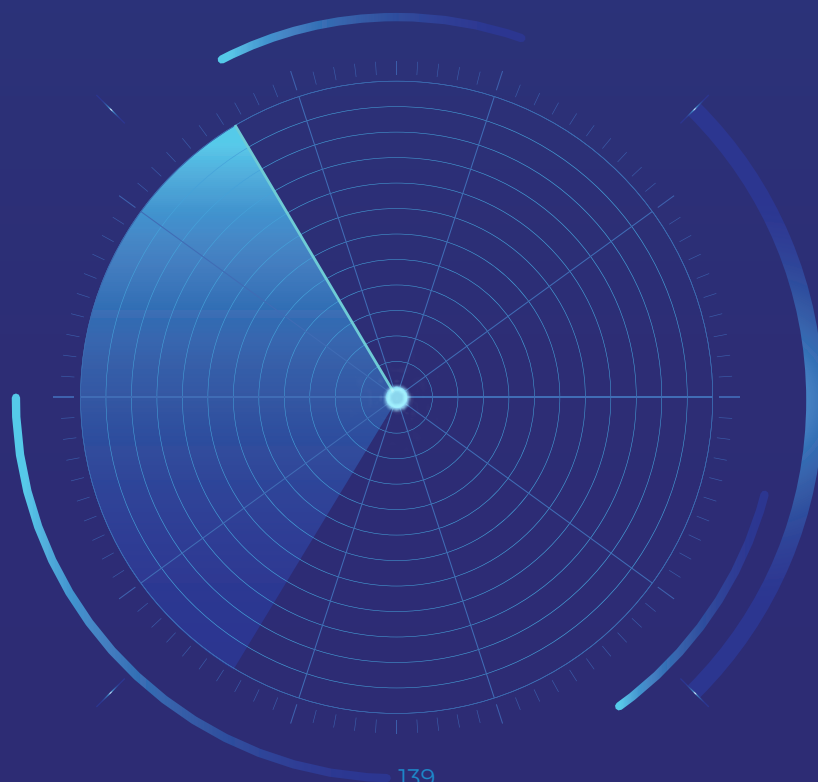
Head of GPW Venture Network





#07

# Competitiveness and potential for further growth



## #07

# Competitiveness and potential for further growth

## 7.1. Competitiveness – how important is it?

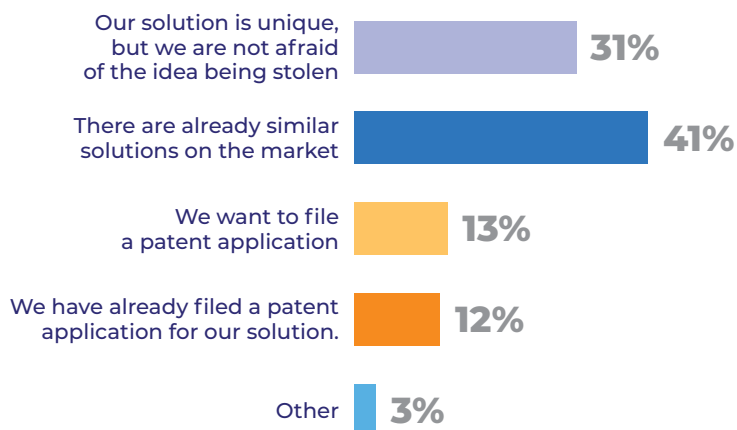
By definition, the essence of a startup is innovation. Completely new ideas, applications - approaches to solutions that no one has come up with before - are one of the reasons why founders want to develop and later commercialise their business. Others choose an alternative path - operating in a specific segment, they do not want to start a technological revolution, but they have an idea for themselves, they see a niche worth exploring. They see long-term trends and want to jump on the rising tide. However, they cannot be sure that others will not seize the opportunity at the same time.

It is worth noting at this point that - especially for startups - not everything can be protected against copying and the competition is not sleeping. While patents can protect a technical solution, they do not apply to software and this is for many startups the basis of their business. Therefore, either the solution in question must be difficult to copy, or the niche or market segment in question must be so capacious that there is 'room at the table' for everyone. Investors, on the other hand, are not looking for the business Holy Grail, but for a sensibly developing company that enables stable growth with the prospect of an adequate return on investment at the time of exiting.

In the Startup Poland survey, young companies present a very diverse approach to protecting their ideas. The largest proportion of them, it turns out, does not create unique technology at all - they choose and develop tools already existing on the market. This was the answer given by 41 per cent of the respondents. There is also a sizeable group of startups declaring that their solution is so unique that they are not afraid of having their idea stolen (31 per cent).

However, there are also startups that want or feel compelled to secure patent protection. Twelve per cent of those surveyed already have a patent pending for their solution and a further 13 per cent are thinking of filing a patent application.

### What is your approach to the protection of the startup idea itself?



This survey also shows that Polish startups feel the breath of competition on their backs, although it is not a big problem for most of them. For 38 per cent, the domestic competition is so small that they do not have to worry about it, while as many as 35 per cent declare that they offer a unique solution on the Polish market and have no competition here.

There are 21 per cent of such entities that face competition at a medium level, which means, however, that they have to spend some of their resources on distinguishing themselves on the domestic market. For 5 per cent of the companies, on the other hand, strong competition is a real problem and it is very difficult for them to break through with their offer.

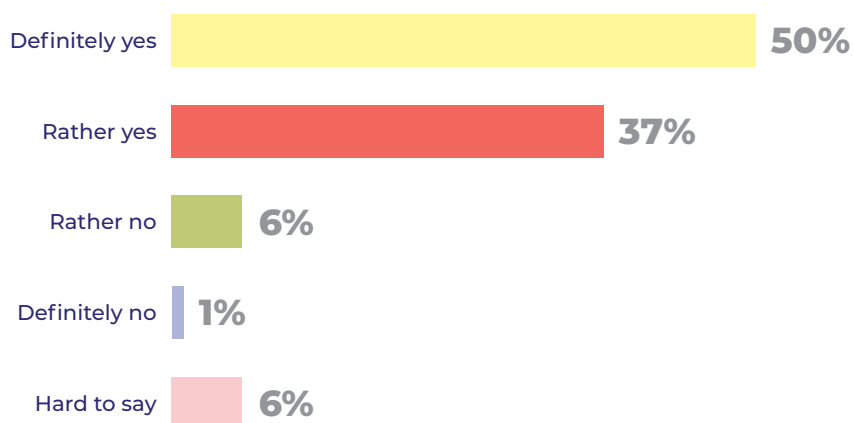
### Is there any competition for your solution on the Polish market?



It is one thing to compete with startups at home, but it is something else to fight against competitors from abroad or in a foreign backyard. Startups taking up the gauntlet on the international stage need to rely even more on knowledge and the uniqueness of the tool and make sure they have some sort of differentiator that will not only help them fight for foreign customers, but also for capital from investors. Certainly, the current major slowdown in the global startup market is making such moves significantly more difficult.

However, the survey shows that the vast majority of startups have (or at least declare that they have) the right knowledge and tools to compete with foreign companies - this was the answer given by as many as 87 per cent of the respondents. There are 11 per cent of such entities that do not feel they are able to take on this challenge at the moment.

#### Do you have the knowledge and tools to compete with foreign solutions?



Recent times have brought changes that mean that technology companies may be starting to worry not only about the actions of their direct competitors, but also about new technology entering our lives with momentum. The advent of ChatGPT at the end of last year, followed by other artificial intelligence solutions, revolutionary for many, caused quite a stir in many circles. Some felt threatened, others saw entirely new opportunities. However, it is still difficult to say at this stage whether the increasing capabilities of AI solutions are a change for the better or a recipe for disaster.

In the case of startups, i.e. companies whose solutions rely heavily on artificial intelligence algorithms, for the time being the vast majority see no threat to themselves. As many as 77 per cent of those questioned are optimistic that AI is a supporting tool for them and will never manage to replace the solution they are developing. Others are still hesitant, waiting, with 14 per cent of the survey participants responding that they do not yet know whether AI is a threat to them. Those who see a threat, declaring outright that AI will be able to deliver their service in its entirety, are currently 3 per cent.

## Does AI threaten your business?

Yes. We provide a service that may soon be entirely delivered by AI **3%**

No. AI provides support for us, but it will never be able to replace... **77%**

I don't know. Time will tell. **14%**

Other **6%**





# Focus on competition more important than a perfect product

Competition is an intrinsic part of the business landscape, and for startups it is one of the biggest challenges, but also brings opportunities. In a world where innovation is an everyday occurrence, understanding the competition and using it effectively in a company's strategy is key to sustainable success.

In the initial phase, startups often focus on validating their idea and acquiring their first customers. During this turbulent phase, competitor analysis can sometimes be underestimated. However, overlooking this issue can lead to strategic mistakes, such as incorrect product positioning or misplaced pricings.

From an investor's point of view, it is becoming increasingly rare for start-ups to have the conviction that their product is so innovative that there is no competition for it. On the other hand, the topic is very often still treated too superficially. And in this area, startups should be well prepared when talking to VCs, looking not only at the direct competition in the immediate environment, but above all at the perspective of the customer and the problems that the product or service solves. Competitive analysis is also about many components - from competitive advantages, geography, alternatives, to barriers to entry, and most importantly it is a very dynamically changing landscape - losing focus on the environment can sometimes cost much more than underdeveloping your own product or service.

Competition is not only a threat – very often it is also an opportunity. On the one hand, competition can stimulate growth, forcing startups to constantly innovate and improve their products; on the other hand, it is also a chance to learn and see what works or doesn't work. In the extreme, it is also knowing who to buy or be bought by....

Over the last few years, it can be seen that Polish start-ups are thinking more and more boldly about the global market, and thus the possible clash with the often stronger competition. On the other hand, a greater emphasis on the analysis of the competition (including those that have fallen) would certainly be beneficial for the effective setting of an action strategy.

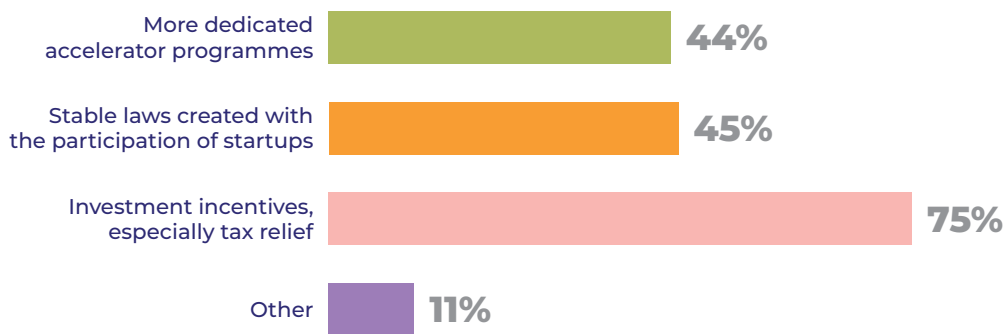
**Jacek Ostrowski**  
Managing Partner  
Simpact Ventures



## 7.2. Changes needed to accelerate growth

In the current difficult moment for startups, various forms of support for this sector are becoming even more important than before. Startups asked in the survey about what changes they need in order for their company to develop faster, answer unequivocally – it is above all the state that has to engage in specific tasks in order to facilitate the functioning of young technology companies, whose success will benefit the entire Polish economy. According to the respondents, this support should first and foremost mean investment incentives and, in particular, tax relief. This answer is indicated by as many as 75 percent of the respondents. Slightly fewer than one in two respondents sees stable legislation – importantly – created with the participation of startups – as crucial. Almost the same percentage expects more acceleration programmes to support their further growth.

What changes on a national level do you need to make your startup grow faster?





# Fostering a stronger European startup ecosystem

A dynamic startup ecosystem is crucial for developing successful entrepreneurial ventures, offering a nurturing ground for growth, innovation, and success. The essence of such an ecosystem lies in its ability to enhance the chances of a startup's success and its evolution into a mature, sustainable business. Fostering this environment demands a clear understanding of its core attributes.

## **An Alliance to synchronise European efforts**

Strengthening Europe's startup network is not a solitary endeavour but a collective mission requiring participation from all European Union (EU) countries. The creation of ESNA - the Europe Startup Nations Alliance – marked a step toward realising the goal of placing Europe at the vanguard of global startup innovation.

ESNA's strategic focus encompasses identifying best practices for startup-friendly policies, enhancing cooperation between countries, promoting technology and innovation. It stands as a unified front to accelerate Europe's entrepreneurial potential and foster a competitive startup ecosystem by implementing the following eight Standards:

1. Fast startup creation and smooth market entry
2. Attracting and retaining talent
3. Favourable stock option policies
4. Innovation in regulation
5. Innovation in procurement
6. Access to finance
7. Commitment to social inclusion, diversity, and democratic values
8. Digital-first

## Startup Poland's Commitment

In 2023, Startup Poland embraced this vision by joining ESNA, signalling its commitment to nurturing its burgeoning startup scene. Poland's startup landscape, home to over 5,000 startups, is rich and diverse, with most businesses operating within the B2B sector and predominantly self-funded. This young yet robust ecosystem exemplifies the potential and energy required to compete globally.

The vitality of a startup ecosystem cannot be sustained by the entrepreneurial spirit alone; it thrives on the constructive collaboration between startups, investors, academia, and government. Poland's venture into a collaborative framework sets the stage for a stronger, interconnected European startup ecosystem.

## Europe's Collaborative Future

The road to reinforcing Europe's position in the global startup landscape is paved with the collective efforts of its member states. As ESNA and participating countries like Poland unite under shared standards and vision, Europe is well on its way to achieving a robust, innovative, and competitive entrepreneurial environment. The synergy of diverse European strengths fosters a transformational ecosystem, highlighting the power of unity in diversity. As each nation contributes to this collective goal, the global influence of Europe's startup ecosystem continues to ascend.

### **Arthur Jordão**

Executive Director  
ESNA Europe Startup Nations Alliance



# Summary

This year's edition of this report comes at a very specific time. The economic and political situation is very uncertain and consequently making concrete, strategic decisions is difficult and often postponed. From the survey conducted for our report, a slightly more complicated picture emerges than in previous years. While the basic problems indicated by startups are basically unchanged – mainly difficulties in obtaining funding, too much volatility in the law and not always favourable legislative changes, excessive bureaucracy, fierce competition for employees – they now seem to be even more severe. This is especially true when it comes to the first problem – the financial aspect. The stream of money from investors is much lower than in previous years and without an injection of capital, Polish startups have no chance to grow, finalise further rounds and scale their business.

Since there is therefore no chance for the time being of a change in the attitude of investors and a greater influx of capital into companies, all the other aspects, which we can have an impact on, seem to be all the more important. Especially now, when we are on the threshold of a new government in Poland, it is worth asking the new authorities whether the development of the innovation sector will be a priority for them and whether there are already any plans to not only preserve the status quo, but to strengthen the startup sector – e.g. at the level of support programmes financed from the budget or from EU programmes. Certainly, the likely improvement of relations between the Polish government and Brussels is an important factor here and the release of funds from the Recovery and Resilience Facility that has been announced may be a key change here and a chance to reverse this unfavourable trend. We should therefore, as the entire startup community, keep our fingers on the pulse to ensure that the released EU funds support Polish innovation as quickly as possible.

However, we will still have to wait for these funds. It is therefore all the more important to make changes in the legislative area as soon as possible, taking into account the voice of the startups. The conclusions from our report show quite clearly what the optimal path for improving the situation in this sector is. Investment incentives, further simplification of the rules for setting up a company and running day-to-day operations, reduction of bureaucracy, support programmes for foreign expansion or easier access to participation in public tenders – these are just a few of the first items in need of change in the opinion of the startup community.

Why is this so important? Why should the state take a special interest in this sector of the market rather than another? The answer is clear, although it may be surprising to some. In our view, the innovation sector is a strategic sector. While the raw materials, agriculture and energy sectors are considered by all to be of key importance to the state's interest, opinions are not so clear-cut when it comes to startups. Meanwhile, the thriving innovation sector, and startups are, after all, an essential part of it, provides serious support for the country's economic resilience. The better the climate for startups to function and the more often decision-makers responsible for legislative changes listen to the voice of startups and the ecosystem as a whole, the stronger and more independent the economy is. Innovation can translate into independence on an international level.

On the one hand, it is our duty as the Startup Poland Foundation to communicate our demands and make decision-makers aware of the role of innovation in a modern market economy. However, we cannot demand action on this issue from others alone. It is the startup community itself that must roll up its sleeves and prove its effectiveness by presenting an optimistic outlook for the future, even if it is uncertain. What should be encouraging is that, even in the face of turmoil, almost the entire startup community is able to unite and speak with one voice. Only in this way can we act effectively. This report is proof of that. Having so many people and entities involved in its creation shows that startups understand that a common voice is important. We hope to achieve even more in this field in the coming months, which will certainly not be easy.



# Methodology

The "Polish Startups" report was compiled for the ninth time. Previous editions

are available for download at [www.startuppoland.org](http://www.startuppoland.org). Each successive edition is based on a larger number of respondents. The interest of startups in participating is increasing all the time, and there is a growing awareness among founders that the collective voice of the entire community is a strength and can translate into concrete solutions to support the sector in Poland.

An online survey was developed and conducted using the SurveyLab tool. The report containing the results of the survey was created automatically, in real time. The survey was conducted between July 4 and September 4 2023. We managed to reach 4841 opinion makers. The vast majority of the respondents were founders of startups and a small number were people employed by startups..

The selection of surveyed entities was random, with no indication of preferred startup characteristics, such as industry, development stage, business scale, company size or number of employees.

Responses from entities operating in the market for more than 10 years were not taken into account.

# Footnotes

<sup>1</sup> [www.failory.com/blog/startup-failure-rate](http://www.failory.com/blog/startup-failure-rate) 155 str

<sup>2</sup> [www.firma.rp.pl/start-up/art17071231-sentione-to-polski-startup-z-19-mln--zl-dotacji-na-chatboty#error=login\\_required&state=42c6eb36-4aaa-4871-8d41-da22b-ba693e2](http://www.firma.rp.pl/start-up/art17071231-sentione-to-polski-startup-z-19-mln--zl-dotacji-na-chatboty#error=login_required&state=42c6eb36-4aaa-4871-8d41-da22b-ba693e2)

<sup>3</sup> [www.cleantechforeurope.com/publications/cleantech-q2-briefing-2023](http://www.cleantechforeurope.com/publications/cleantech-q2-briefing-2023)

<sup>4</sup> [www.statista.com/outlook/hmo/medical-technology/worldwide](http://www.statista.com/outlook/hmo/medical-technology/worldwide)

<sup>5</sup> [www.gov.pl/web/rpp/raport-top-disruptors-in-healthcare-2023](http://www.gov.pl/web/rpp/raport-top-disruptors-in-healthcare-2023)

<sup>6</sup> [www.psik.org.pl/images/Dane-i-raporty/Raporty/Women-In-PEVC-Report\\_November-2021.pdf](http://www.psik.org.pl/images/Dane-i-raporty/Raporty/Women-In-PEVC-Report_November-2021.pdf)

<sup>7</sup> Raporty IDC i Pitchbook z 2022 roku

<sup>8</sup> [www.kadry.infor.pl/kadry/hrm/szkolenia\\_i\\_rozwoj/5428666,Kompetencje-naj-chetniej-zdobywane-w-Polsce.html](http://www.kadry.infor.pl/kadry/hrm/szkolenia_i_rozwoj/5428666,Kompetencje-naj-chetniej-zdobywane-w-Polsce.html)

<sup>9</sup> [www.news.crunchbase.com/venture/vc-funding-falling-report-data-q-2-2023-global/](http://www.news.crunchbase.com/venture/vc-funding-falling-report-data-q-2-2023-global/) 83

<sup>10</sup> [www.business2community.com/statistics/startup-statistics](http://www.business2community.com/statistics/startup-statistics)

<sup>11</sup> [www.embroker.com/blog/cyber-attack-statistics/](http://www.embroker.com/blog/cyber-attack-statistics/)

<sup>12</sup> [www.global.download.synology.com/download/www-res/solutions/2022/pl\\_cybersecurity\\_report\\_2022.pdf](http://www.global.download.synology.com/download/www-res/solutions/2022/pl_cybersecurity_report_2022.pdf)

**We are grateful to  
SurveyLab for creating  
the survey for the Polish  
Startups 2023 report**



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Co-funded by the  
European Union



ISBN 978-83-968029-2-7

