# Hungarian Startup Report 2021

Discovering what makes
Hungarian startups
succeed

**Research Methodology**

ST/RTUP P/LAND

**Analytics, Research Partner**

bell research

**Content**

Bernadett Sitku - Startup Hungary
Csongor Bias - Startup Hungary
Reka Forgach - Smells Like Copy

**Design**

DESIGN TERMINAL          LIVEPOINT ●

**Available online at**

startuphungary.io

**Exclusive Media Partner**

Forbes

**Startup Hungary Partners:**

**Founding Partners**

DESIGN TERMINAL
OPTIMISTS FIRST          Google          iVSZ

**Strategic Partners**

Microsoft          PortfoLion
                   member of otp group

**Supporters**

citi          LEAD VENTURES          day1
              day one capital          SEON

# Table of Contents

# TABLE OF CONTENTS

**Csongor Bias**
Managing Director at Startup Hungary

# The second Hungarian Startup Report

2021 was one of the most successful years in the Hungarian startup ecosystem. We have seen the highest number of top-tier international VC investments, the largest rounds, multiple exits and amazing achievements from local startups as well as the increasing impact of talent-hubs and micro-networks.

Some of the brightest highlights include SEON's record high, 10M USD Series A round. Led by Creandum, the early-stage investor of companies like Spotify, Kahoot!, Bolt, the round was packed with European fintech legends, including co-founders and VPs from Revolut, Tide and N26. SEON has been growing astronomically ever since and was recently recognised as the fastest-growing fraud prevention company in the world. Creandum also led an 8M USD investment into Craft, which recently won the prestigious Mac App of the Year Award. Lastly, at the end of the year, Bitrise snatched a 60M USD Series C led by Insight Partners, setting the record for the largest VC round raised by a Hungarian startup to date.

But it was not only hot investment rounds that made 2021 successful, there were multiple exits as well. Tresorit, the security SaaS company pioneering end-to-end encrypted file storage, was acquired by Swiss Postal Services. Budapest-based product studio Makery was acquired by TIER Mobility. And at the very end of the year, Starschema was acquired by the Indian HCL Technologies.

Despite these promising signs of growth in the Hungarian ecosystem, it's undoubtedly lagging behind the size and amount of success stories compared to other startup hubs in the region. In 2015, there were only 6 startups in the region valued over 1B USD, today we have more than 37. Hungary was not able to produce any new unicorns during this period, although two companies have strong potential to reach this status.

The presence of international, top tier investors is a good leading indicator of successful companies in the making. Even if we had a record-high big ticket deals (3) this year, this number is still significantly lower than any other country in the region. It's very telling that to date there is only one team that went through Y Combinator. By comparison, there are at least a dozen regional startups in every batch.

That said, the growing importance of micro-networks and talent hubs makes us extremely bullish. Seasoned talents from the previous generation of startups are starting, investing in, or joining new companies. We see ex-founders who start new companies that can utilize the knowledge and network gained through their previous ventures. The local VC market is also improving. Although non-governmental funds made only a few local and many more international investments across CEE, we see them participating in hotter and hotter deals with notable co-investors - a good sign of their expanding network and presence.

This year, 212 tech companies took our survey, almost the same amount as last year, however almost half of the respondents were new. Two-thirds of the teams who dropped, dropped because they don't operate anymore, or because they're in the process of shutting down. Based on our assumptions we were able to reach about 25% of the

estimated 1,000 active startups in Hungary. This makes this report the most thorough, systematic assessment of the local startup ecosystem to date.

Our mission remains the same as last year: to understand what makes successful Hungarian startups successful, and what keeps struggling teams from achieving their goals. As we wrap up the second annual report, we have even more reliable data. Though half of the respondents are new, we have identified similar trends - indicating that the sample is good and underlining the need to repeat the survey year over year to track the local ecosystem's growth and demands.

This report mirrors the 2021 survey in its identification of startups as either 'champions' or 'pretenders.'

**The "champions" are startups that:**

- have average monthly revenue over of 80K EUR, in the last 6 months, and
- have been growing at an average 5% or more per month in the last 6 months, or
- have a well-known international VC backing them.

**The "pretenders" are startups that:**

- are over 3 years old (started in 2018 or earlier),
- have not yet reached product-market fit, and
- have no regular revenue or only an average monthly revenue of under 10K EUR.

# Ten takeaways from the second Hungarian Startup Report

## 1.  More champions, fewer pretenders

Out of 212 respondents, we identified 27 Champion startups with 80,000+ EUR in monthly revenue and an average monthly growth rate over 5%. This is a slight increase from 2020, with one-third reaching this milestone just this year, demonstrating that there are a handful of startups capable of transitioning into a growth phase. Another positive finding is that much lower number of "pretender startups", those who are 3 years old or older, make less than 10K per month and struggle to find product-market fit. The number of these teams shrank by 50%, to a total of 37. One of the reasons for the significant decrease in the number of pretender startups is that many were shut down.

What do champions have in common? In one word, internationality. Half of the champions that were surveyed earn at least 75% of their revenue from international clients, demonstrating a clear success in breaking into the global market. Champions are more likely to have international team members, which goes hand-in-hand with a higher rate of ESOPs (Employee Stock Ownership Plans) in place. Private funds and international VCs are the main source of funding for these teams.

## 2.  Startups have global ambition, but struggle to achieve international growth

Startups are bullish about their future, even more so than last year. 41% of respondents believe they are very or rather likely to become a unicorn (7% increase from last year), whereas 84% think they will be a key player in international markets. Ambition and optimism are key requirements for success, however, the data also suggests that most teams struggle to find a path for international growth.

A telling example of this is that in 2020, 34% wanted to raise funds from international VCs in the following year (in 2021- 42%), however only a handful of companies (less than 5) were able to do so. Ultimately, approximately only 10% have succeeded in raising international funds at all. Additionally, there was no change in startups succeeding with international sales.

## 3.  Going global remains an unsolved challenge

A majority of respondents, 37%, focus solely on the local market and another 19% report less than a quarter of their revenue coming from international sales. While 92% of the respondents want to expand to new markets in the near future, most - especially those with a low ratio of export - want to expand primarily in CEE. Only 37% express wanting to enter the US market. Feeling that 'their product isn't ready' or 'wanting to test locally first' are the main reasons for staying local. However, this is in opposition to the general assertion that most successful startups focus on large international markets from the get-go. Several of the critical essays address this non-sequitur, by pointing out the differences in local and international markets, and the prohibitive price of restructuring local companies for bigger, foreign markets.

## 4.  30+ year old well educated men are the typical startup founders

Contrary to the prevailing cliché, most startup founders are typically not in their twenties. In fact, based on the similar results from last year's and this year's data, the average startup founder looks more like a well-educated man approaching middle age. Over 70% of CEOs are above 30. In fact, half of the champions are run by entrepreneurs over 40. Most startup founders have a master's degree, with roughly an equal number of them bringing a background in business versus technical science. Three out of four respondents have spent significant time abroad, either working or studying. Founders usually have a few years of work experience - only 109 respondents started their startups after finishing their

studies. About 25% of the founders have either launched or worked at a startup before, though there is no direct relationship between the success of their current startup and previous startup experience. There is certainly a lack of gender diversity. Only 29% of startups reported having a female co-founder, and only 12% have a female CEO.

## 5. Most startups are building web / mobile products, focus on B2B and subscription based business models

Once again, the results confirm that most startups are building B2B SaaS products and services. 61% of respondents are building mobile or web products and 59% of them earn money through a subscription model. We see many startups trying to target consumers and businesses simultaneously, but startups in the B2C tend to struggle more. Compared to last year, the number of startups focusing on B2B versus B2C has increased by 10%. The top deep tech verticals that over startups reported using were AI, Big Data, Fintech, Hardware & IoT and Medtech, with a little over 60% of teams reporting using one or more. The results corroborate the assumption that the CEE region is better primed for building tech-heavy, B2B startups than consumer products.

## 6. Finding talent, getting traction, and implementing marketing & sales skills is hard

The biggest challenges for most teams are around getting traction - a recurring theme for the startup survey. More than 61% of the startups selected sales and customer acquisition as their top challenge. Lacking resources include professionals to work with (43%) and access to clients (44%). In the top three, we also saw fundraising issues (41%) which were driven mainly by the pretender segment. While for champions (51%) attracting qualified personnel was the number one barrier to growth, for pretenders (46%) it was various financial barriers.

## 7. There were no significant changes in the local fundraising scene

Three out of four respondents have raised some type of external funding, largely from local VCs and incubators. This number indicates a 10% increase from last year. And while 42% startups plan to raise from international VCs in the next 12 months - a 20% increase from last year - overt optimism might influence reality.  In 2021 only 2% of respondents succeeded in actualizing their global fundraising strategy. 70% of VC-backed teams raised purely from "public funds" (either fully or majority EU or government- backed). In contrast, 15% raised from only private funds (mostly private money backed). The number of local VC funded startups that raised from both private and public VCs is extremely low, coming in at 11%. The significant, 6% decrease suggests that private and public VCs continue to work separately from each other, even more drastically than before. One additional insight is that local accelerators and local angels funded fewer startups than local VCs (11% and 8%, respectively). Angel investments are still a rarity, with VCs dominating from the pre-seed stage forward.

## 8. Startup collaborations with corporates are reasonably popular

More than 55% of all respondents reported a strategic collaboration with a large corporation, a 10%+ increase from last year. In 62% of cases, this means that the corporation is a strategic client of the startup, while many also create innovative solutions together (25%) and use the partnership as a distribution channel (26%). The rise in corporate-sponsored startup programs and collaborations has seen strong participation by startups, with 12% participating in a corporate accelerator and 11% raising money from corporations. The collaborations are not only quite popular, they are also well-received, with 50% of teams rating them good, and 33% of them rating them very good.

## 9. Foreign entities are the primary solution to overcoming regulatory and fundraising barriers

Most startups said their biggest legal burdens include strict rules for acquiring public financial support, bureaucracy in day-to-day operations, and the fact that Hungarian legal entities are not ideal for receiving funding and managing cap tables. 27% of teams have already formed a foreign entity, mostly in the US (37%) or UK (19%). A further 23% of all respondents plan to open a foreign entity in the next 12 months. If this comes through more than half of the Hungarian startups will operate primarily as a foreign startup a year from now. The biggest benefits of opening, switching to, or forming a foreign entity are better chances of raising money, better conditions for development, simplicity, and a transparent regulatory environment and less bureaucracy.

## 10. Awareness about upcoming EU regulations is low

This year we had a dedicated chapter about policy related topics, including the upcoming European data & platform regulations. More than 70% of the respondents had either never heard about the Digital Services Act and the Digital Markets Act, or were unaware of their expected implications, although these regulations will definitely affect them when they take place. Startup-friendly ESOP structures and payroll tax cuts are the biggest desires of local startups regarding policies that could support them.

# Startup Founders

# Where are Hungarian startups coming from?

**Where are Hungarian startups incorporated and where else do they have operations?**
*% of all respondents, n=212*



*Source:
Startup Hungary*
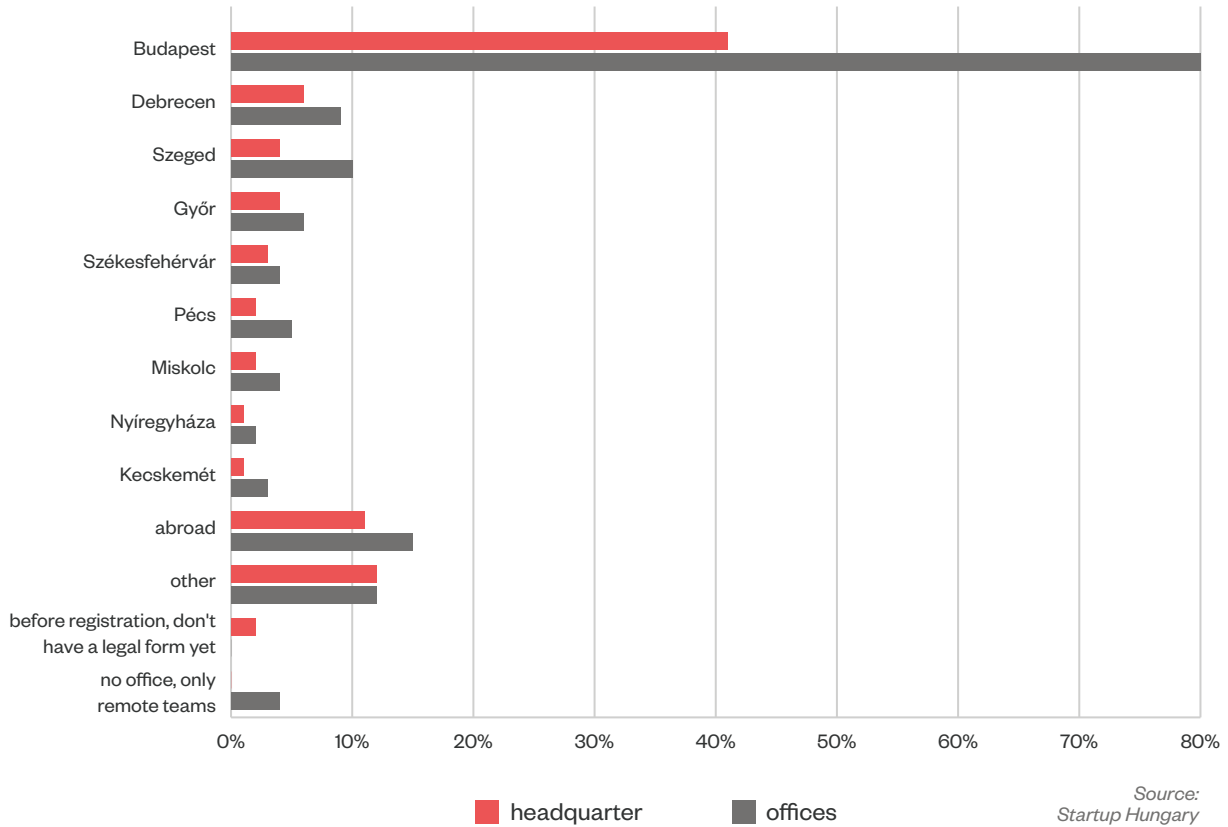
**How many startups are registered regionally, but have operations in Budapest?**
*% of all respondents, n=212*



- Budapest registered startup
- regionally registered startups with a Budapest office
- regionally registered startups

*Source:
Startup Hungary*
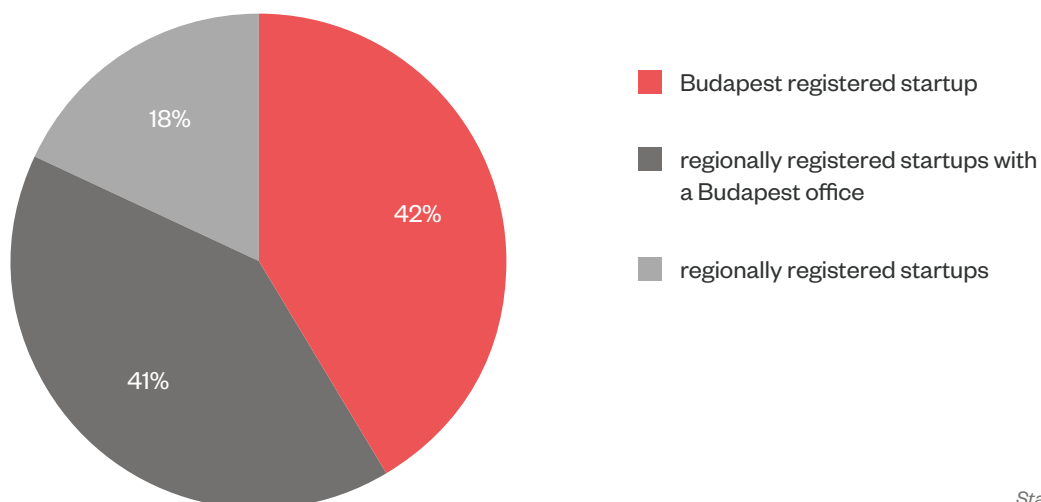
# This is how Hungarian startups incorporate

**What is your startup's legal entity?**
*% of all respondents, n=212*
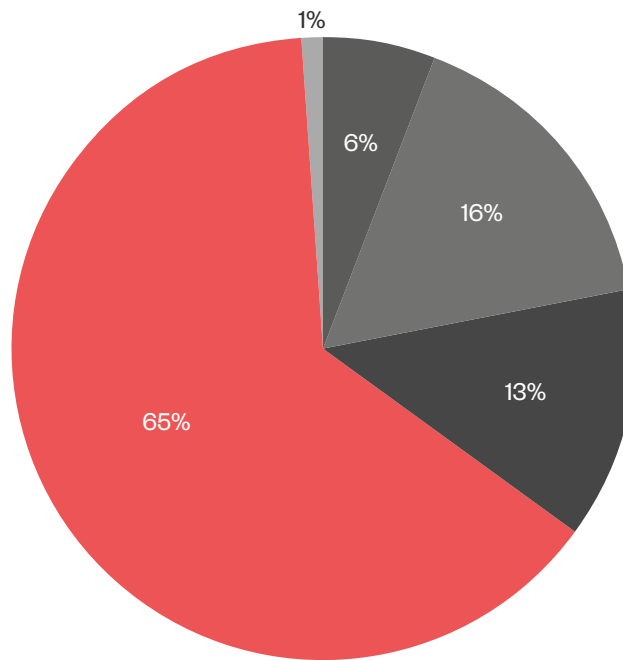


- pre-registration, we do not have a legal form yet
- foreign entity (with or without Hungarian subsidiary)
- Hungarian joint stock company (Zrt.)
- Hungarian limited liability company (Kft.)
- other

*Source:*
*Startup Hungary*

# Venture building is for kids of all ages

## How old is your CEO?

*% of all respondents, total n=212, champion n=27, pretender n=54*

| | less than 30 | 30-39 | 40-49 | 50 and more |
|---|---|---|---|---|
| total | 24% | 44% | 26% | 6% |
| champion | 11% | 63% | 26% | |
| pretender | 15% | 56% | 22% | 7% |
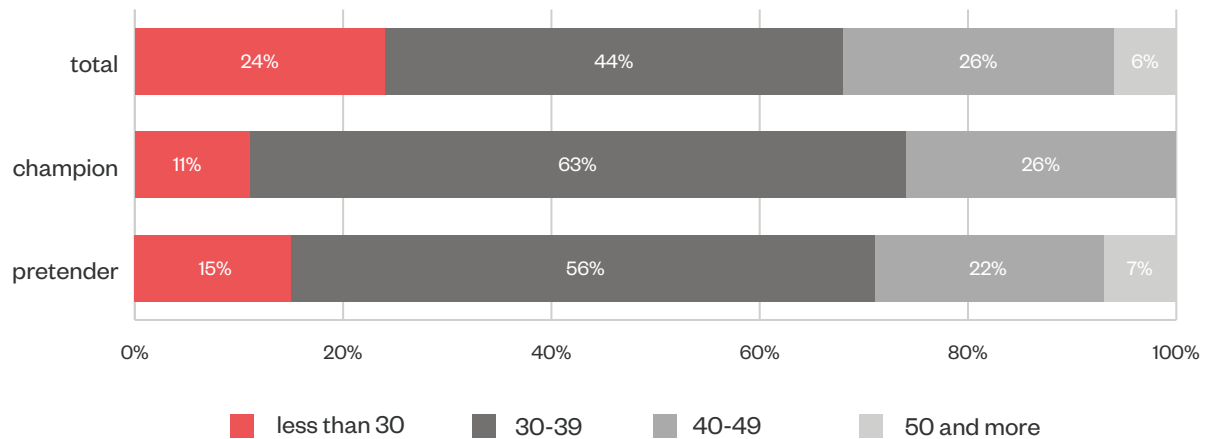
*Source:*
*Startup Hungary*

## How old are startup CEOs by top vertical?

*% of respondents / top verticals*

Verticals (top to bottom): AI / ML, Big Data, Fintech, Hardware, Education, Medtech, Productivity / MGMT, Analytics / BI, IoT, HR tech / Tools

Legend: less than 30 | 30-39 | 40-49 | 50 and more
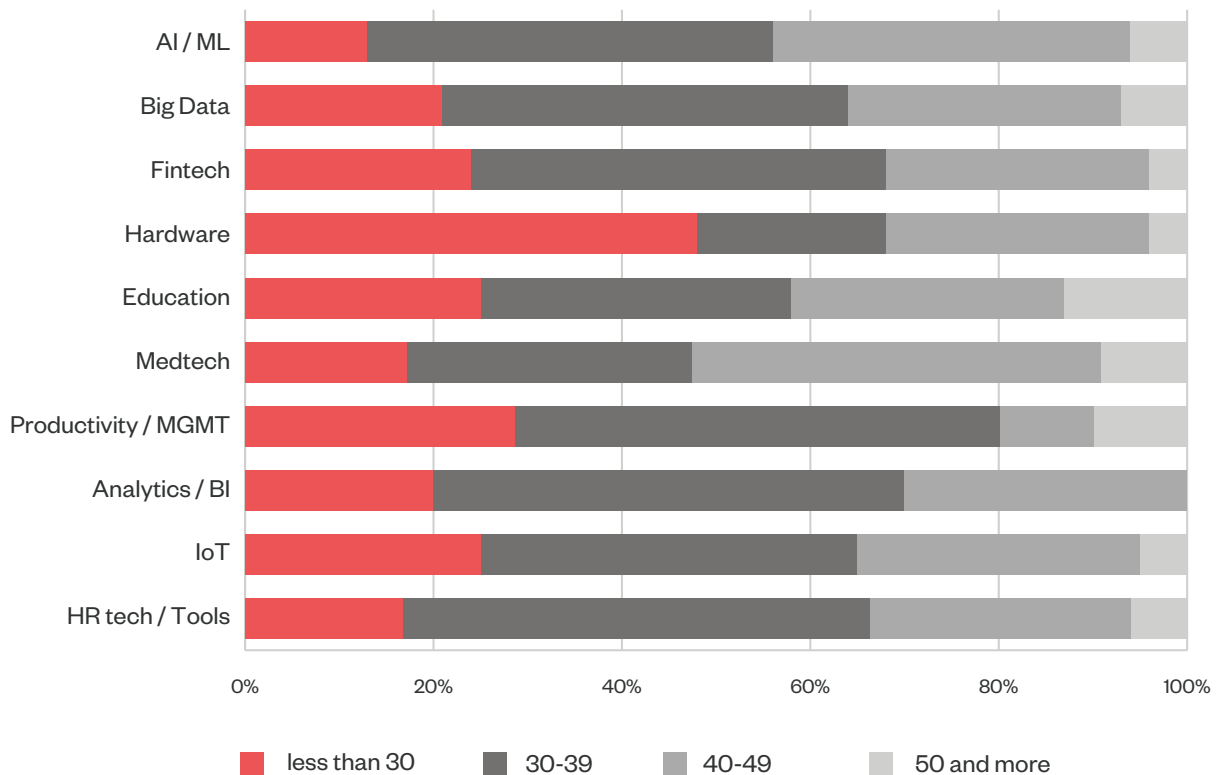
*Source:*
*Startup Hungary*

# You will find less women in startup leadership

**Female startup co-founders and CEOs**
*% of all respondents, n=212, champion n=27, pretender n=54*
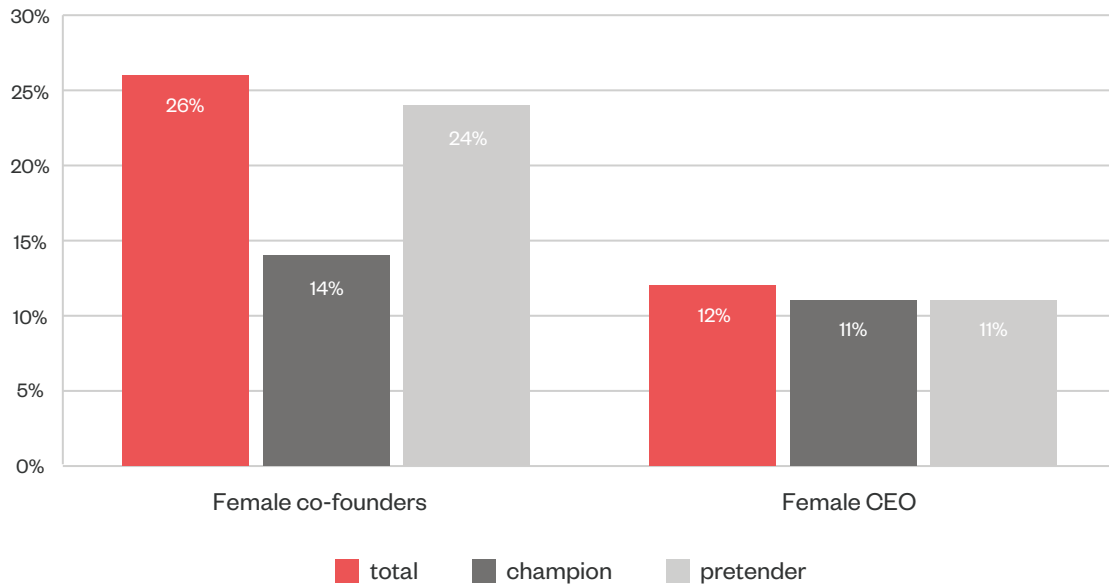
**Verticals with the most female co-founders**
*% of all respondents / top verticals*
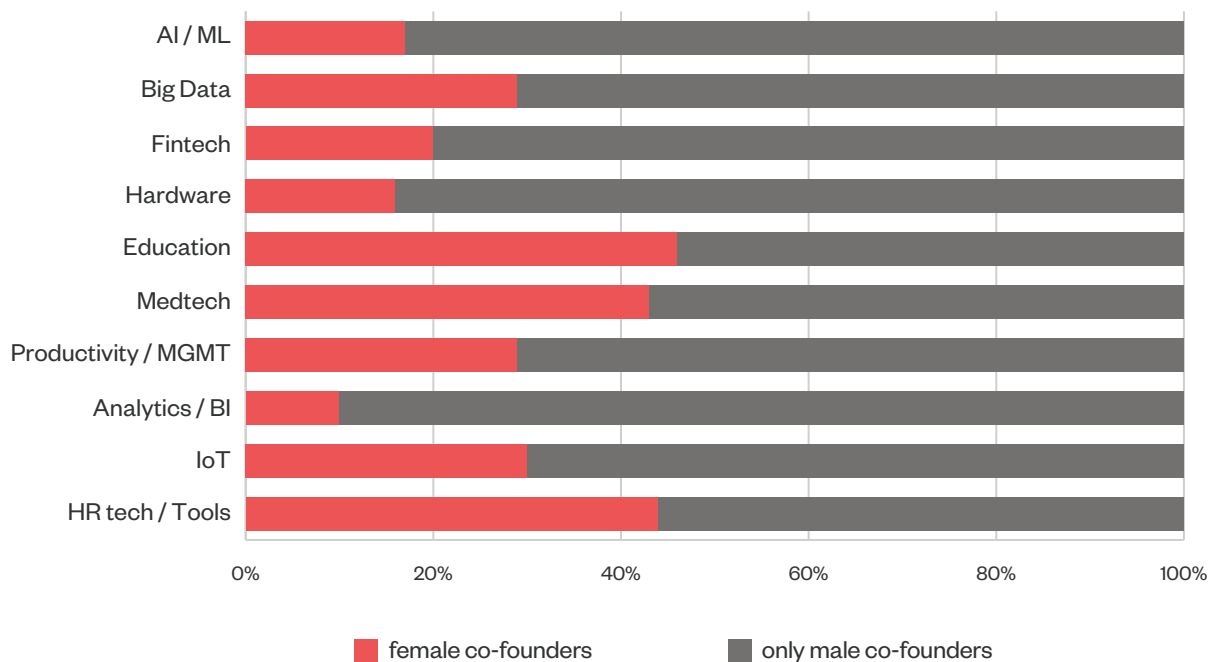
**Priszcilla Várnagy**
CEO at Be-novative

# What advice would I give my younger self as a female entrepreneur?

Walking into a physical or virtual all-male meeting room as a female entrepreneur, or representing your company or your country as a female leader, often feels like stepping in on unequal footing. I don't believe in calling out gender in business. We are all entrepreneurs. I like to think that if I don't get far enough, it's because of my performance, and that it's in my control to learn to do better next time.

Running a high-growth team or building a profitable business takes outstanding performance independent of a leader's gender. But there are a few characteristics I have learned on my journey that I would have liked someone to tell me in the early days.

Women often need to overcome some extra barriers to feel empowered, start a tech company and take their businesses to success. I want to be there to encourage women entrepreneurs with my story and the lessons I learned so far starting a startup company, winning Silicon Valley competitions e.g. at NASA, signing clients from San Francisco to Buenos Aires to Johannesburg and Bangalore, turning the business into a profitable venture, signing on strategic partners, nurturing it to maturity, and learning from numerous challenges on the way. So what would I tell my younger self, if I had to start again, with everything I know today?

1. **Leadership roles are changing.**

> *There is no leader who has it all, instead, there are different character types who are strong in different things.*

The trick is knowing your strengths and building on them.

We don't need to have a loud voice with a scary critical attitude and dominant character to be respected, valued and looked up to. Female leaders are usually more human-centered, empowering, kind, and empathic, and like to lead by example. This is a strength in itself that we rarely talk about.

When I was pinpointing my own leadership style soon after starting Be-novative, a fellow psychologist offered to help by analyzing a lesser-known personality test. She came back with the results: negative 95% on the leadership scale, indicating that it must be uncomfortable for me to lead a company.

This bothered me so much, that being a psychologist myself, I had to look into the psychometry and statistics to see how the scale was constructed. I found out that the questionnaire characterised leaders as extremely autocratic individuals, with statements like "I expect people to respect me when I step into a room simply because of my title." I completely disagree with statements like that, so I achieved the extreme negative score.

It was not easy to explain to myself that I could still be a good leader. We need to be aware that women's self-confidence can be more fragile. If I could, I would suggest to my younger self to ask for regular and direct feedback from my team on 1:1s or retrospectives, as well as from our clients and users about the product and business we are building.

*Never be afraid to ask and listen every single week - especially in the early days. Authentic and specific feedback is worth its weight in gold.*

**2.    Learn just in time.**

Focus on a single goal and gather all the available information to be the best at it. There are thousands of fellow startup founders in Hungary and around the globe who share their success stories and know-how openly. Be open to learn all about the market, typical pitfalls and good practices from blogs, podcasts and directly from founders. Experiment in short increments, both quantitatively and qualitatively, create a hypothesis and draw conclusions systematically. Most of the success I achieved in the early days was because I went out to ask for feedback from potential clients, mentors, angel investors and entrepreneurs in Silicon Valley - even if it was so early that it felt uncomfortable.

**3.    There is no compromise in a product-led company.**

The lesson I learned much later is that a B2B business is a complex genre and it is not enough to understand your paying customers. Focusing on building a great product for an everyday user is equally important.

Meet users, create a system to prioritise both user and client feedback. Use metrics and data to backup your decisions. Form hypotheses. Test every single feature you are building with discovery interviews, wireframes and design prototypes before writing a single line of code, then UX test before release. Record users' sessions with recording tools, do AB tests. Come back and improve. This is 30-40% of the job we should be doing. You should not be making compromises on quality, but on the number of features you build. Many times, I made the mistake of letting software developers decide how to simplify or enrich development without measuring properly. It turned out, it was never a technical question first. It was always about understanding the one, gold-medal winning feature that people loved about our product.

**4.    Focus on results, know your numbers, show ROI.**

Capture the value you create both for your users and customers. Own your numbers and present them to clients, investors and to your team. You are good enough, be proud of them as they are. Round your numbers down. You don't need to create too high of expectations, because delivering on your promise is much more important for a long-term relationship than setting high hopes in the beginning. This mindset helped me achieve profit after a hard period in the company's life. You don't have to know and promise everything. Authenticity will take you far.

**5.    Landing clients is a numbers game. Invest more in marketing and do it personally.**

Don't get comfortable too early with 5-10 global companies in the pipeline. Get comfortable with improving your conversion percentage week by week from a bigger pool.

A great product comes first, but without marketing, it won't get the attention it deserves. Create valuable posts that actually help people and are worth sharing. Build SEO and spend time optimising it. In the early days everyone told me it's a complex profession that I shouldn't try on my own, but that's not true.

You can learn and do so many things that will absolutely make a difference.

*Product-market fit is half about reaching the market. Be there, care for your community and share.*

**6.    Trust your intuition - if something doesn't feel okay, it probably isn't. If anything makes you uncomfortable, change It.**

Clearing the air and drawing your boundaries in the moment will create the opportunity to reroute the business decision or conversation onto the track you would like it to be on - rather than leaving you in a T-junction with a bad feeling afterwards.

Hire A-players, people you can trust blindly. More than once, I felt something was off with a contracter or new hire - despite everyone telling me hiring them was the right thing to do. I felt pressured and acted against my intuition.

Hiring the right people always helped us scale, while not saying no early enough caused us to spend way more than we should have.

> *Optimal business management comes with practice - but there is a rule of thumb: if you feel something is not right, be good to yourself and trust your inner signaling system. Drawing your boundaries and protecting them only makes you stronger.*

The topic of female entrepreneurs, or to be more precise, the question of why there are so few women in the world of startups, has been around for years. And it's an important and still unsolved issue that is also present at home. The most recent data published by Startup Hungary (the Hungarian startup ecosystem report) shows that only 29% of the founders of Hungarian startups are women. And

only 12% of CEO positions are filled by women. Of course it's never too late to get started, but all founders should be encouraged to write their own stories and tune into their individual strengths.

I never felt it was harder to manage a company as a female founder. My experience was that, especially in Hungary, the environment was always welcoming. When following presentations by men on national or international stages e.g. at a Global Summit to present about topics I was confident in - I got more attention. I felt it was to my advantage that I stood out.

If, as women, we can show our strengths, we become even more memorable and will even engage more people in the audience. It is a blessing to diverge from the status quo. I strongly believe that we women can use our strengths to our advantage and that it's worthwhile to start the journey as a female founder.

What is the final take-away for female entrepreneurs? The key idea is that it's okay to be different. We're facing great challenges and challenges are, in fact, welcome if we address them and find solutions together with originality and confidence to learn.

# Startup founders are well educated

**Highest educational qualification of startup founders**

*% of all respondents, n=212, champion n=27, pretender n=54*



total   champion   pretender
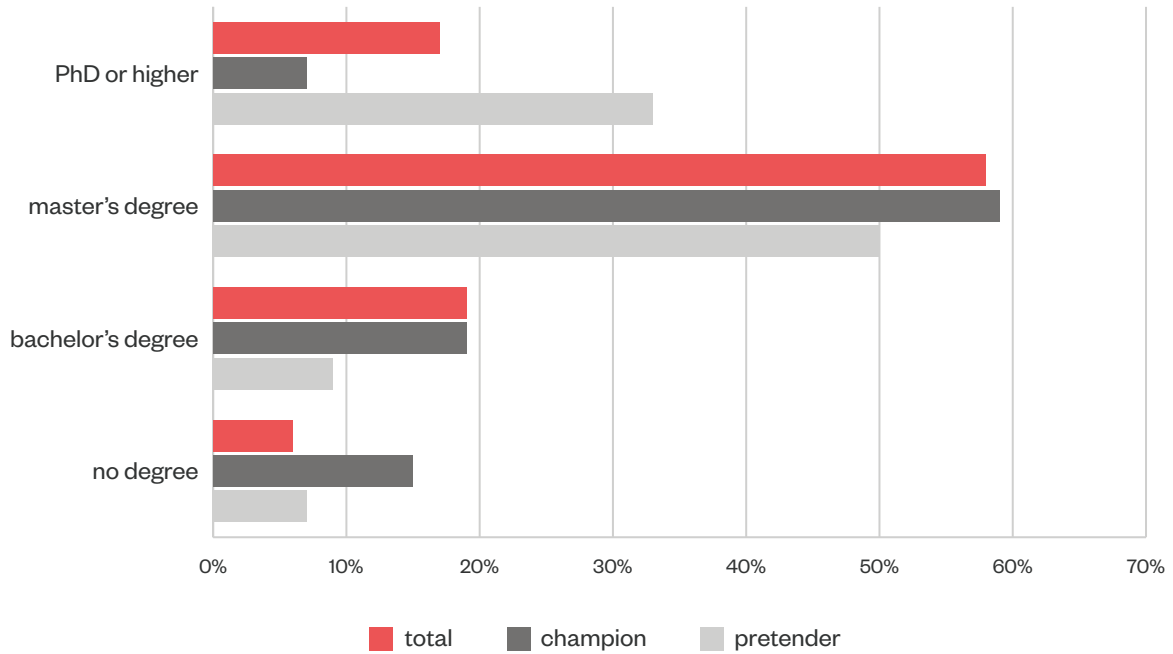
*Source:*
*Startup Hungary*

# Social sciences or engineering - which is more useful?

**What did you and your co-founders study?**

*% of all respondents, n=212, champion n=27, pretender n=54*



Legend: total, champion, pretender
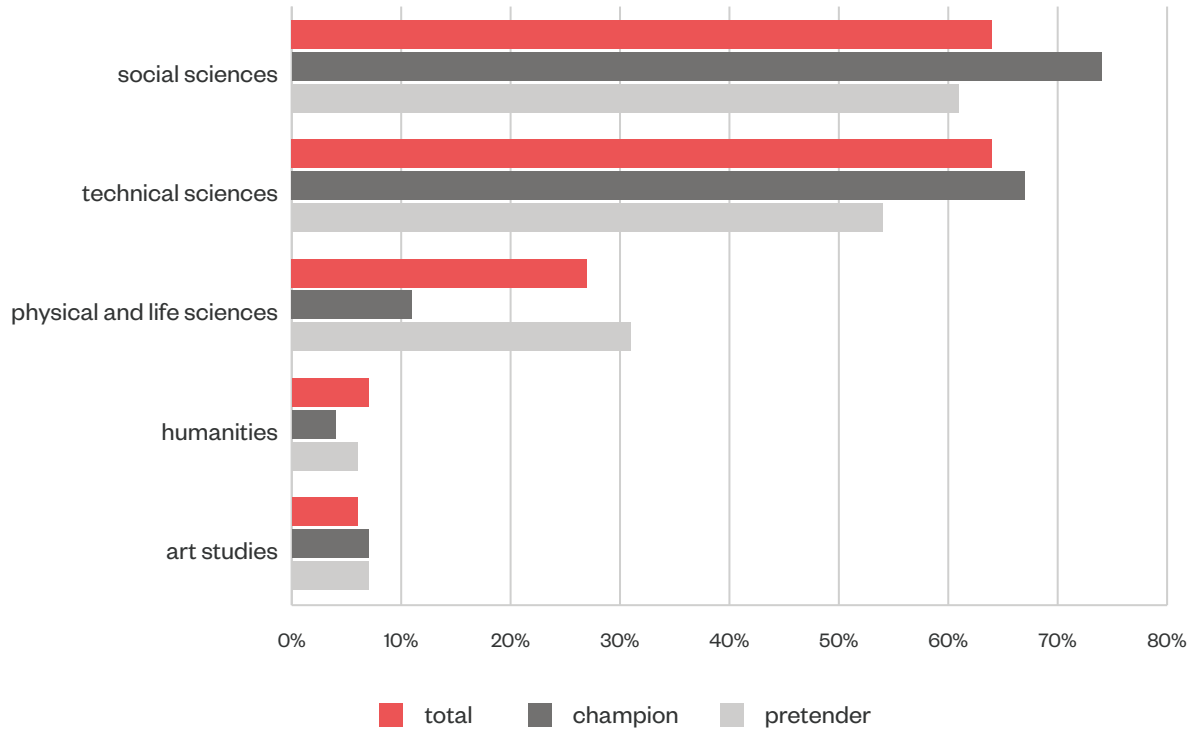
*Source: Startup Hungary*

# Previous work experience

**What did the team's founder(s) do before starting a startup?**

*% of all respondents, n=212, champion n=27, pretender n=54*
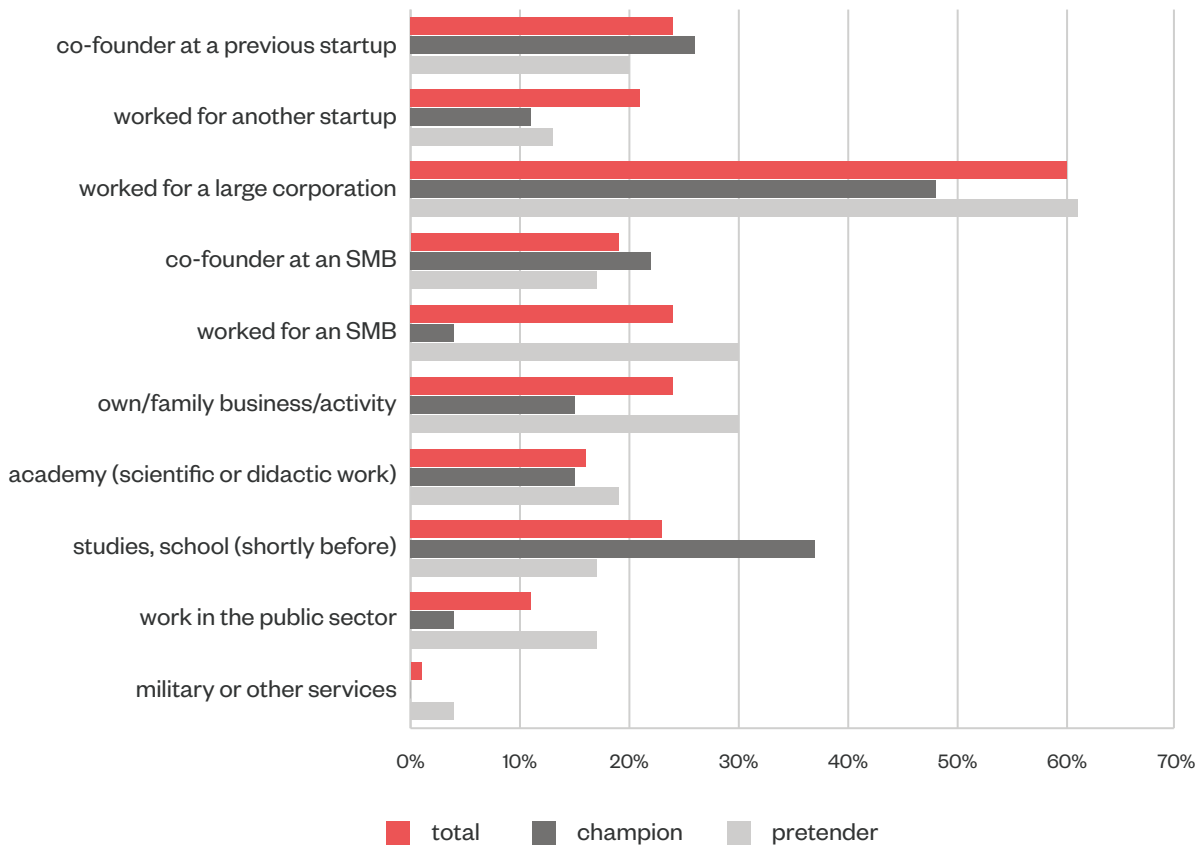


Source:
*Startup Hungary*

# Is serial entrepreneurship an indicator of success?

## What did the team's founder(s) do before starting a startup?
*% of all respondents, n=212, champion n=27, pretender n=54*

*Source: Startup Hungary*



| | startup experience | other business experience | no business experience | no answer |
|---|---|---|---|---|
| total | 24% | 65% | 10% | 1% |
| champion | 26% | 59% | 15% | |
| pretender | 20% | 69% | 9% | 2% |
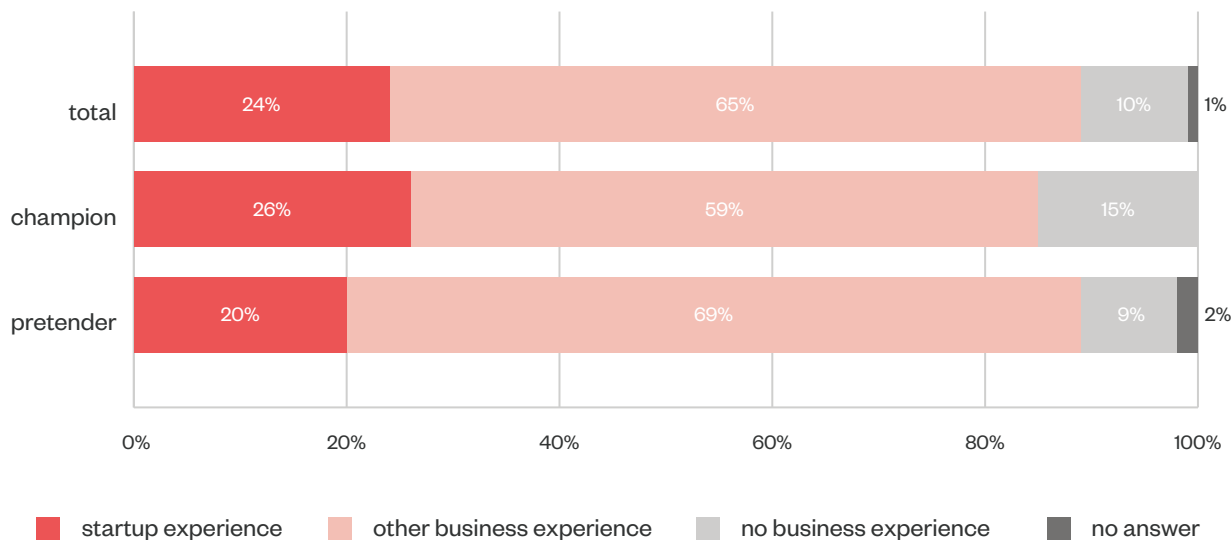
## Did the founder's previous startup raise over 100K EUR in external funding?
*% of all respondents with previous startup experience, n=76*

*Source: Startup Hungary*



- Yes 55%
- No 45%
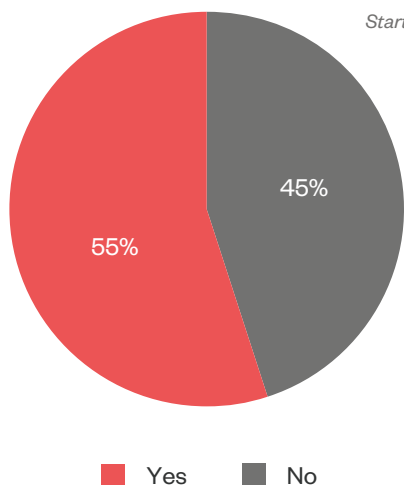
## What is the status of your previous startup?
*% of all respondents with previous startup experience, n=76*

*Source: Startup Hungary*



| | % |
|---|---|
| I left, but it's still operating | 32% |
| it was sold (exit) | 21% |
| it failed | 36% |
| it's still operating | 8% |
| other | 3% |
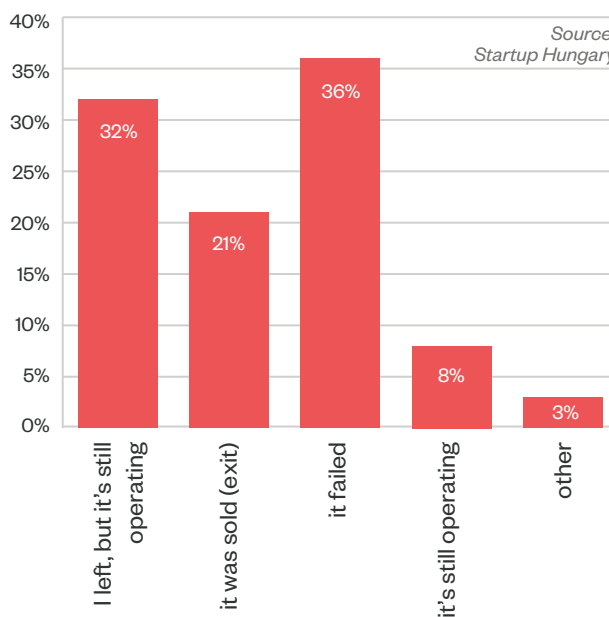
# Previous experience abroad is common

## Did the CEO or any of the founders live abroad for over 3 continuous months at school age or after?

*% of all respondents, n=212, champion n=27, pretender n=54*

*Source: Startup Hungary*



Legend: total · champion · pretender
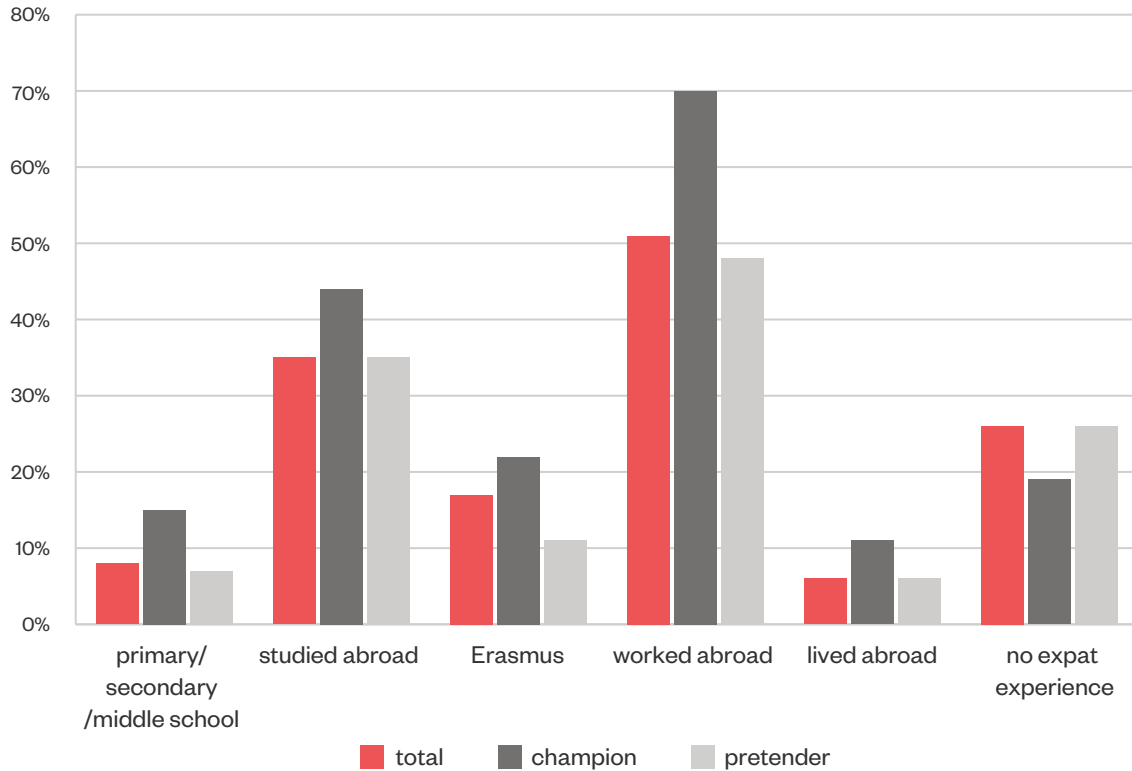
## Have any of the founders or the CEO lived abroad continuously for more than 3 months at school age or after?

*% of all respondents, n=212, champion n=27, pretender n=54*

*Source: Startup Hungary*



| | w/ expat experience | w/o expat experience |
|---|---|---|
| total | 74% | 26% |
| champion | 81% | 19% |
| pretender | 74% | 26% |
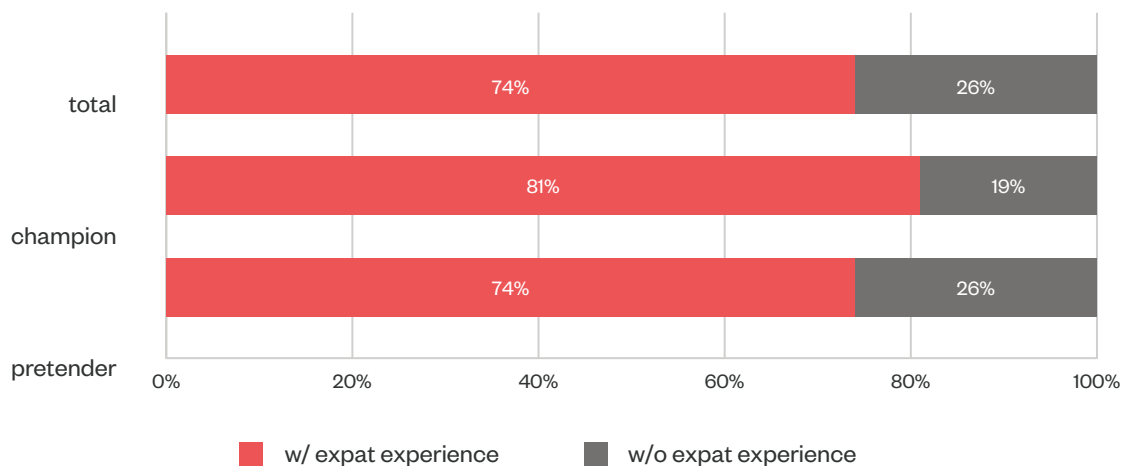
# The motivation question

**What was your biggest motivation for starting your startup?**

*% of all respondents, $n_{2020}=232$, $n_{2021}=212$*



- **solving an important problem**
- **to work with great people at a great company**
- **to influence/help millions of people**
- **getting rich by selling the startup, exit**
- **other**

*Source:
Startup Hungary*

**Ákos Deliága**

Co-Founder and Managing Director
at Talk-A-Bot Kft.
Board Member at IVSZ
and Startup Hungary

# Founder self-assessment in high-growth scale-ups

The Hungarian startup ecosystem is evolving and companies are growing increasingly faster (53% grow >5% per month compared with 46% in 2020) however, there are obvious barriers that limit expansion - especially internationally. The biggest barrier Champions face on their way to the top relates to attracting qualified personnel (at #1 with 56%) and the lack of management capacity (at #2 with 19%). This is a clear indication that organizational development and the efficiency of internal processes require constant improvements during the scale-up phase.

As the CEO of Talk-A-Bot, I always put a strong emphasis on personal development and organizational development from the very first day of launch. In the early days of a startup, the founders take care of everything: product vision, development, sales, back-office tasks, printing and mailing documents, etc. The company's vision is often vague, without a clear focus. There are so many different options regarding the technology stack, target segments, and pricing model, that it's important to validate every assumption and strive to find product-market-fit.

*I remember that all the four founders attended all the meetings during the first few months of the company, until we quickly realized that roles and responsibilities must be defined.*

We had to create a proper organizational structure that gives space for employees and partners to work independently later on. As a Founder-CEO, you need to be a great professional, operative manager and also a visionary leader - even when there's no one to lead yet.

We currently have a team of 35 people and ~80% of our costs are people-related. A professional organization is a must-have in order to replace:

- instinct-driven management with data-driven decision making
- people-dependent processes with well-defined, repeatable, automated processes
- hero-culture with teamwork where everybody knows his/her added value
- know-it-all founders with leveraging the "collective intelligence" of our talented team
- lack of common understanding with a clearly defined vision and org chart

Naturally speaking, all of the above are especially important for founders and managers. We hired external organizational development experts (Future Proof Consulting Kft and namely Barbara Verő and Patrícia Tarczali) in order to grow the company in this direction.
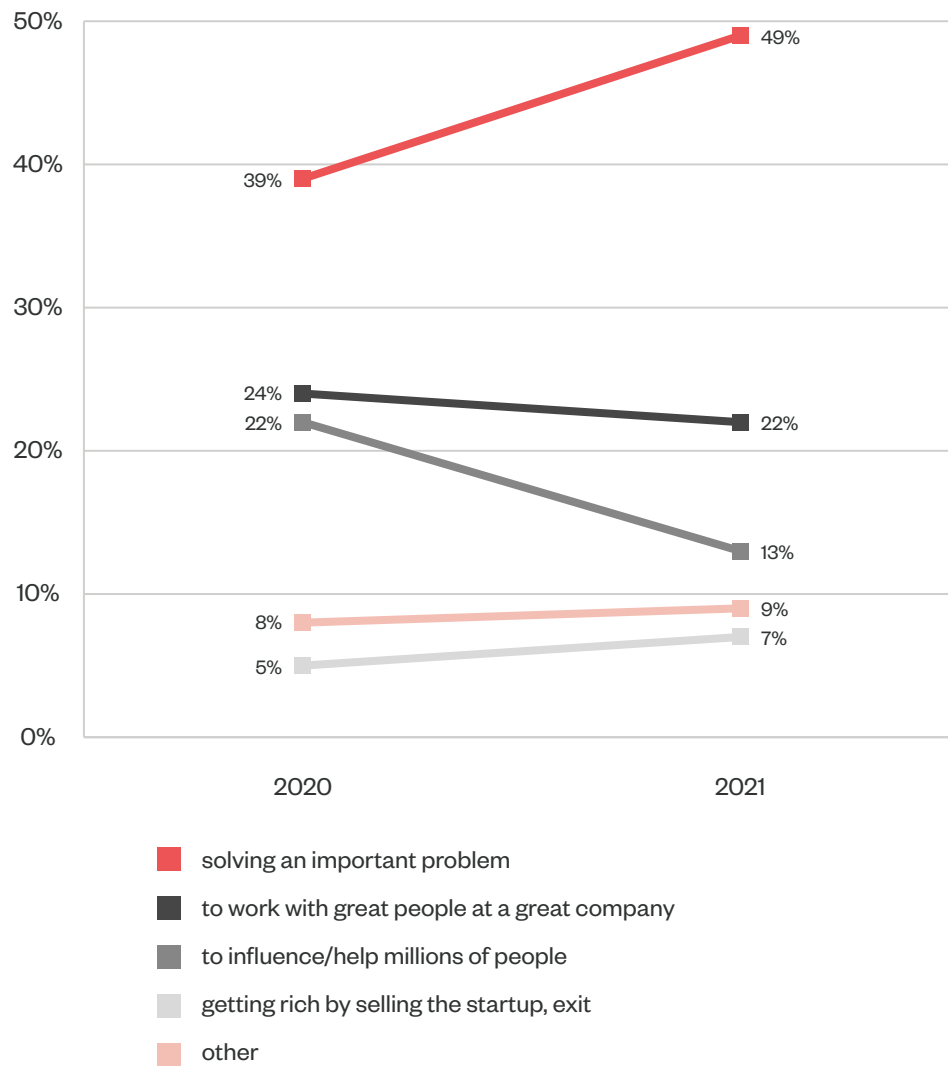This 6-months long project was probably one of our best investments.

*We recommend "human due diligence" before any investment round in order to prepare the organization for rapid growth and to avoid wasting human resources.*

A quite recent challenge is the effect of inflation on salary expectations. The pressure on wages was always quite strong on smaller emerging businesses compared with corporations and large enterprises, where room for negotiating wages may be greater. In addition, during the scale-up phase of the company, we need technologically

advanced solutions, such as artificial intelligence, data science, DevOps and cybersecurity. The work of such specialists is increasingly expensive, and the competitive struggle for good employees is intensifying.

*To address these challenges we created a company-wide competency matrix that tracks the expertise (level 1-5) of each colleague in their own, specialized areas. This helps us to identify single points of failure, where the leave of a key employee would limit the company's development and support capabilities.*

Having such a competency matrix helps us to create salary ranges in order to define a fair salary for each employee. This helps us to identify employees who are underpaid and need a salary increase, and also lets us effectively address salary raise requests.

*Last, but not least, I highly recommend every founder constantly challenge him/ herself and test whether you're the best CEO/CTO/CxO for the job.*

If you find your talent wanting, take a step back and find a professional manager. Building a startup requires a very wide range of competencies, so you may be the best guy during the beginning, but a less ideal fit with 100+ people in your team. Some people just don't have the skills or the motivation to become operative or strategic leaders. We also had changes in the personal life and health that affected a founder's ability to perform over 3-5-10+ years.

You may enjoy being a lead developer (and founder) rather than having constant 1:1 meetings with your developer team. This is totally OK. You may add much more value to your own company as a senior professional and an owner, but not as a manager in the company.

This area deserves a lot of attention and adult conversations amongst co-founders and mentors - be the catalyst and not the limit of your own company's growth!

# Verticals & Business Models

# And the hottest verticals are...

**Which vertical best describes your company?**

*% of all respondents, $n_{2020}=232$, $n_{2021}=212$*
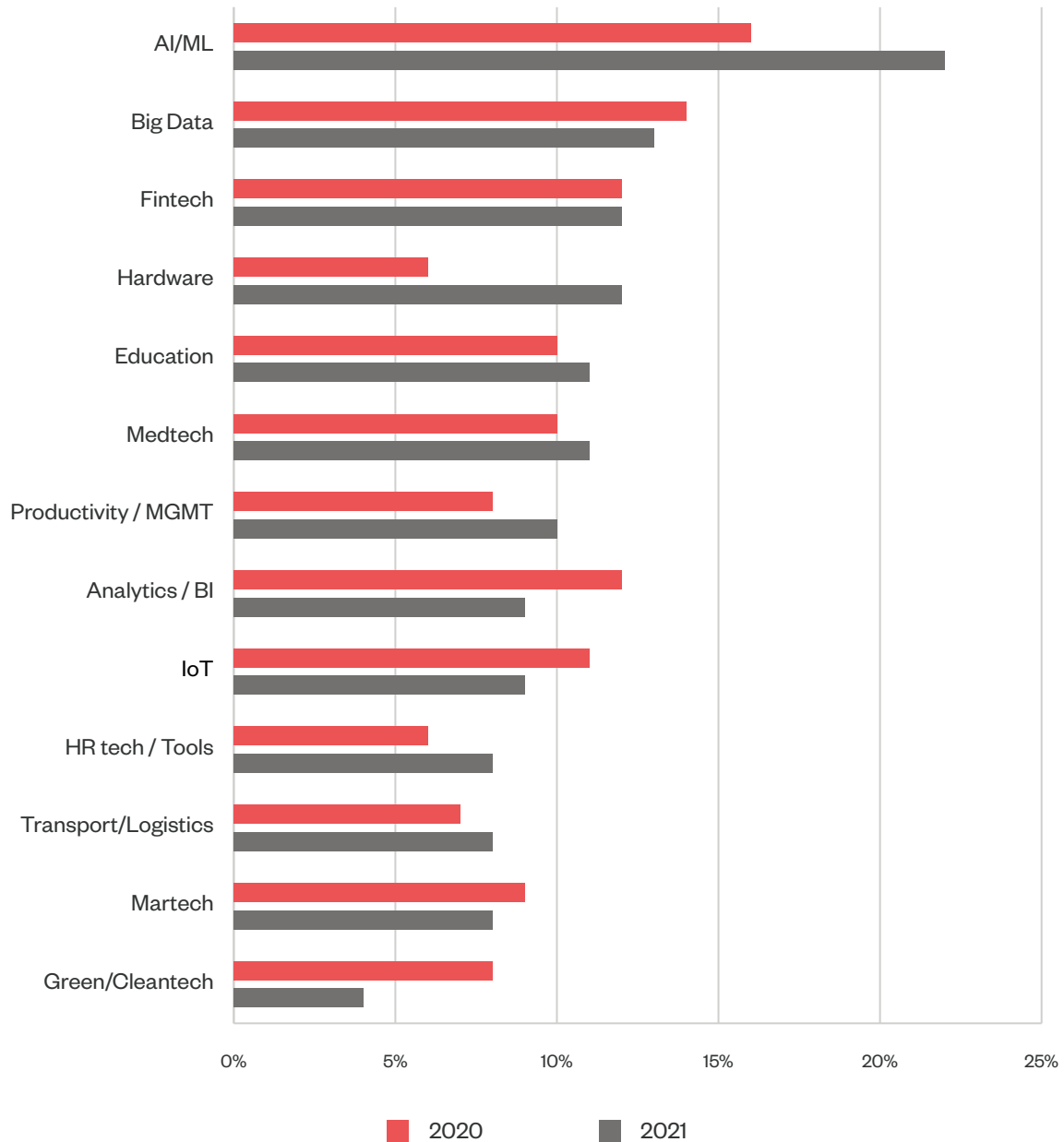


Source:
Startup Hungary

# How common are deep tech startups?

**Success rate of deep tech startups**

*% of all respondents, $n_{2020}=232$, $n_{2021}=212$*



Legend: 2020 (red), 2021 (grey)

*among champions, n=27, among pretenders, n=54*



Legend: champion, pretender
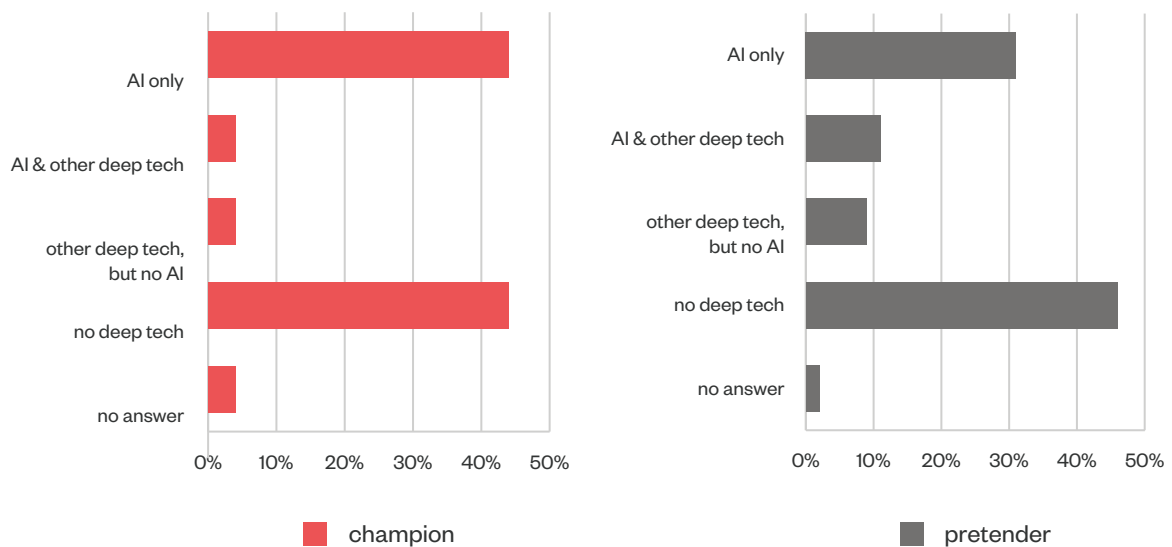
# Products and services being sold

**Choose a category that best describes your product or service**

*% of all respondents, $n_{2020}=232$, $n_{2021}=212$*
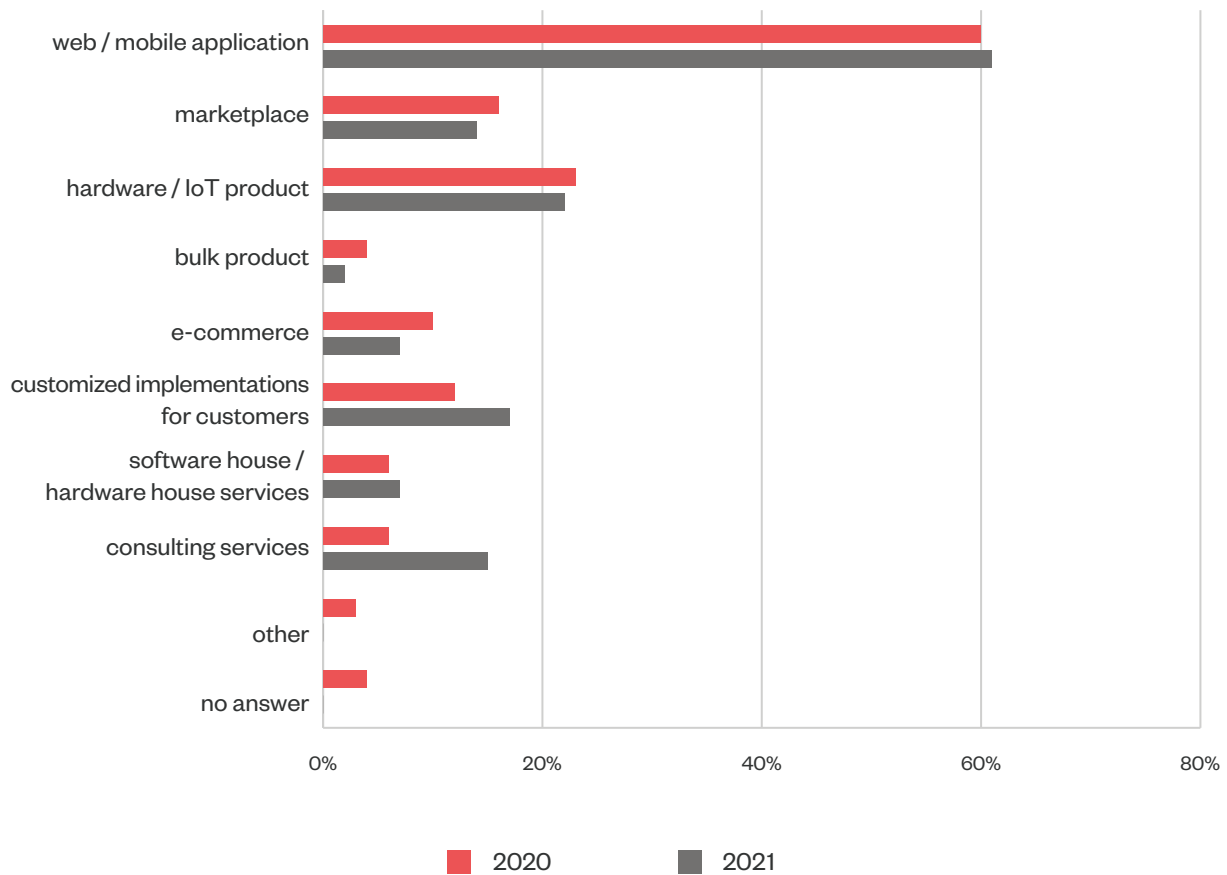


*Source:
Startup Hungary*

# How do startups make money?

**What term best describes your revenue model?**

*% of all respondents, $n_{2020}=232$, $n_{2021}=212$*



Legend: 2020, 2021
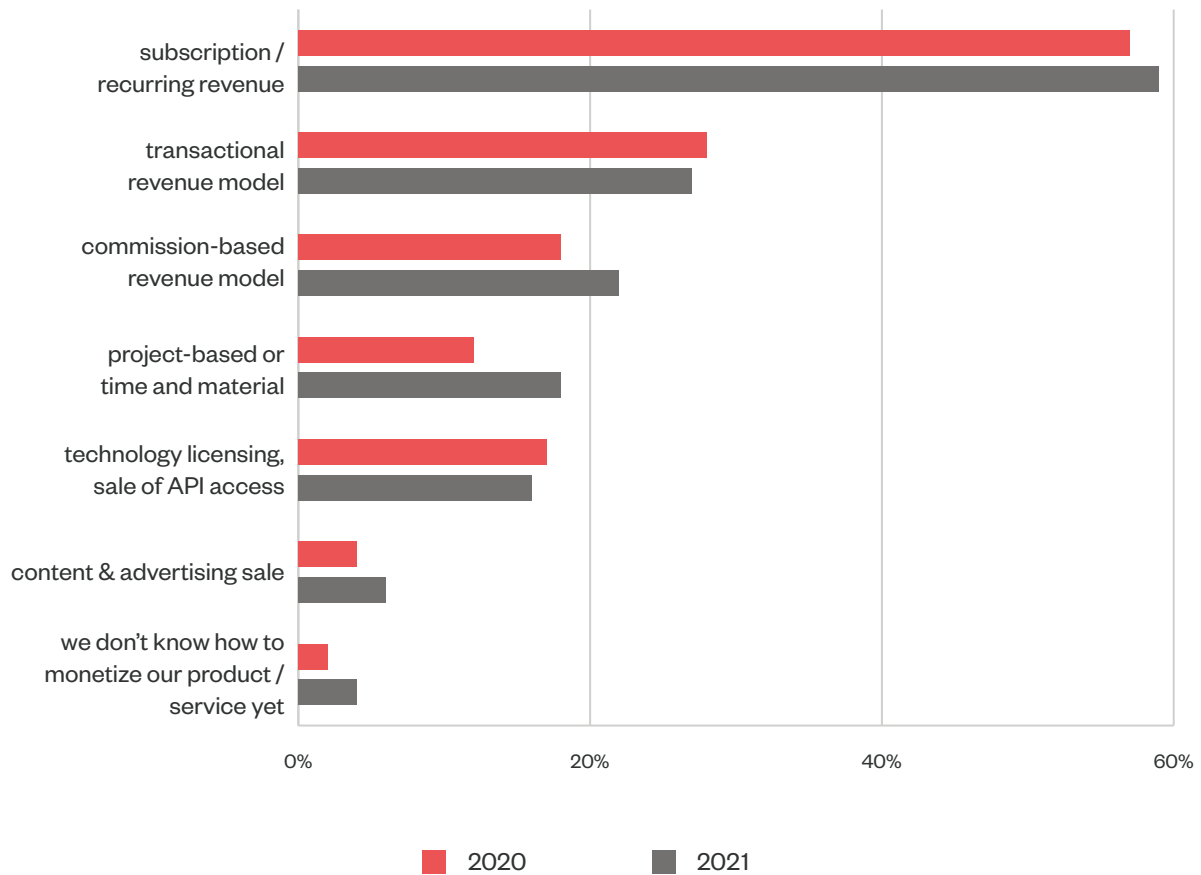
*Source:
Startup Hungary*

# Customer and user demographics broken down

**What kind of customers/users are you targeting?**

*% of all respondents, $n_{2020}=232$, $n_{2021}=212$*
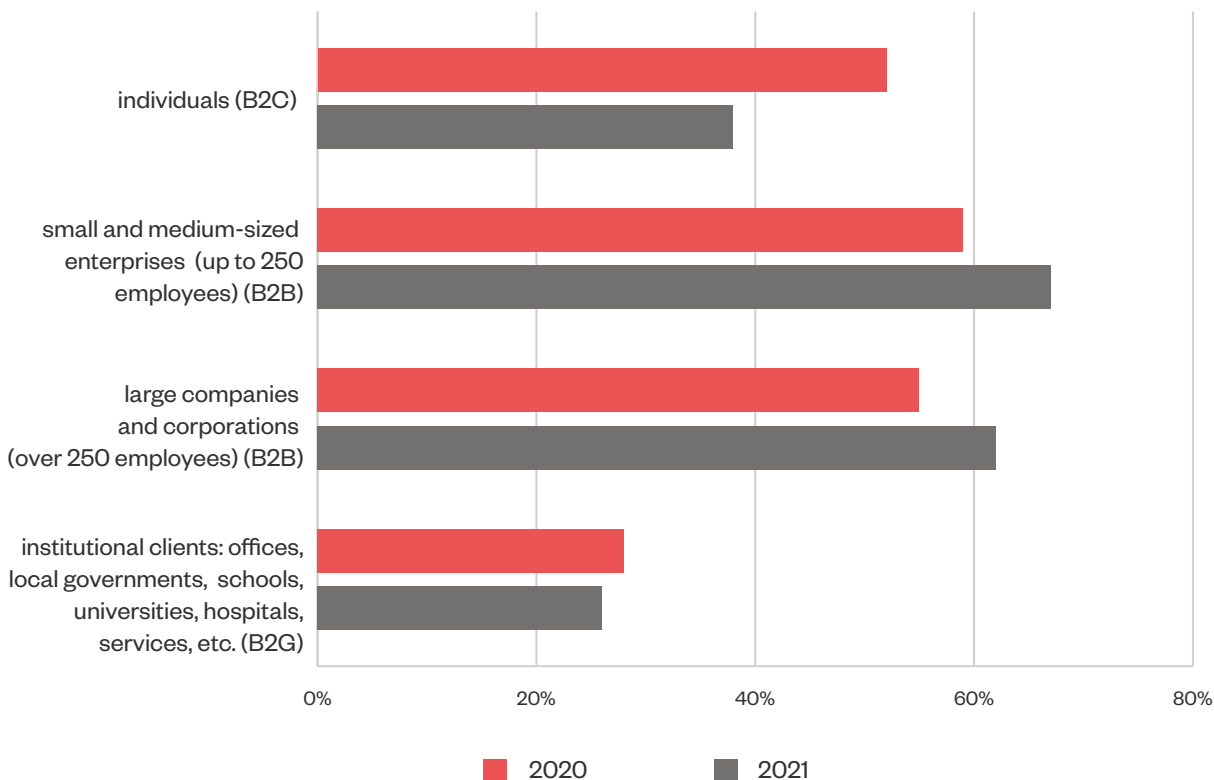


*Source:
Startup Hungary*

*among champions, n=27, among pretenders, n=54*
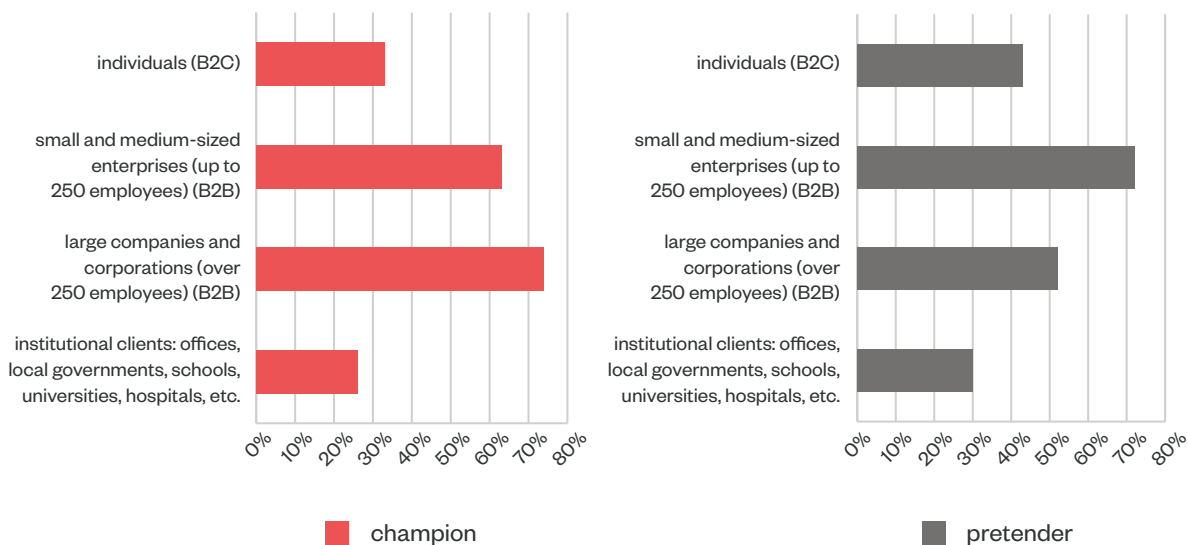


*Source:
Startup Hungary*

**Tamás Kádár**
CEO and Co-Founder at SEON

# Product-led growth strategy at SEON: discovering market fits

From the start, we always knew the importance of product-led growth (PLG).

Many traditional risk technologies rely on huge sales teams to pitch to companies on why their product is better. However, a lot of vendors' products are similar and look to automate decisions without much customization. Legacy products are also more expensive, slow to deploy, and overly complicated.

At SEON, we've developed our product from the ground up to level the playing field for all businesses as fraud continues to impact businesses of any size, any industry.

**What are the important elements of a successful PLG strategy?**

Product-led growth helps to open up the funnel, using our product development process to reach an even wider range of potential customers.

We aim to optimize PLG and identify PQL (Product Qualified Leads) to make it easier for our sales team to engage only genuine and interested prospects, no matter the industry.

We need sales, customer success and marketing all united in their focus around the customer. We define our ultimate objective and deploy strategies that act as a force to push the flywheel towards attaining these objectives.

This flywheel is a PLG framework that consists of four user segments/profiles that correlate with stages in their journey to purchase: evaluator, beginner, regular, and champion.

Our goal is to enhance every aspect of the business to optimize the user experience at each stage, with the pace picking up as more go through the desired process thanks to feedback and constant adaptation on our part.

Having content focused on core problems that our buyers are trying to solve should first educate them, and second, influence them to speak to us so we can see if we are a mutual fit for their problem.

As Marcus Sheridan, author of the acclaimed, *They Ask, You Answer*, describes: "If you truly want to overcome concerns and make your point real, you need to show it. You must teach it. And you certainly must be willing to address it."

Around 90% of our customers come from inbound marketing campaigns because they've either heard about what our product does (and could do for them) or read the content on our website.

In short, we've created SEON for all digital businesses, from small businesses to digital enterprises such as Revolut and Nubank, to spot fraud and abuse on their sites in a frictionless manner – both for their customers and for their risk management employees.

We wanted to rebuild what a risk tool could be through our accessible pricing model, easy-to-use software, and complete transparency.

**Rapid iterations**

Our initial competitors took weeks of commercial negotiations, integration, and much muddier ROIs (return on investments) – whereas we want a rapid time to value.

This route not only differed from the legacy solutions available on the market, but it also allowed us to build high amounts of trust in our own product, with our strategy meeting challenges head-on.

**Purpose-led product development**

PLG principles are in place to improve the user experiences and increase go-to-market efficiency, making it critical to identify one key priority that determines the product development flow.

For us at SEON, it's about making fraud fighting easy and accessible for any business.

Enterprise sales-oriented companies are often scared of letting the customer try out the product on their own. Many B2B startups fall into this trap, as they're worried they'll be copied easily.

We think giving customers the opportunity to test the product for free both casually and live with their existing product stack is more suited to today's customer expectations.

This works because potential customers will discover your solution themselves, try it out, and if it works out, they will come to you.

**Hitting product-market fit**

Once we had an understanding of our key product-market fits, we immediately doubled down on marketing and sales efforts in this segment, to land as many adopters as possible.

By listening to your customer's wants and needs, you gain a great understanding of what's missing and can beat other players, rather than creating a decision making process that relies solely on "what's worked previously".

Sure, this can also make it difficult at times to understand what direction you want to lead the business. However, PLG has enabled us to develop our product faster than any rigid contracts would have. And prioritizing a short time to value (TTV) allows us to provide value instead of forcing clients into lengthy or costly agreements.

PLG enables us to discover new ICPs while we continuously refine the product to fit customer needs.

From having the integration docs online, available in full, to enabling free functionality without signup, we've created a product that lets all online SMEs gain immediate access to fraud prevention products that previously weren't available through legacy providers.

This transparency can also lead you to discover an entirely new market with new use cases, cutting market research costs drastically so you can drive innovation as a company. We realized there's a lot of unmet demand in spaces we hadn't considered yet.

**Remaining resilient**

Still, we've learned over our short existence that you have to pivot a lot once you solidify your product. It takes multiple iterations to expand your offering quickly and cover more angles tied to the problem that you're trying to solve.

It's never straightforward and plans often don't pan out exactly as intended, despite the team's best strategizing.

PLG requires incredibly intuitive and easy-to-use functionality. When we decided to launch our self onboarding workflow, 80% didn't get a full grasp of the product and essentially got lost in the process. This was a massive learning curve – but what is important is that we learned from it.

A huge shift for us was reorganizing our structure to encourage more collaboration and feedback with representatives from each team involved in discussions, all aligned to be entirely customer-centric.

For SEON, the process of nailing PLG is still ongoing. In our next launch, we're focused on making it even simpler for customers to try our product and get a proof of concept to prove our value from day one.

*Combining PLG strategy with talented individuals keen to make an impact, we've been able to grow from strength to strength, and the journey is only just getting started!*

# Growth & Development

# How fast do startups grow their revenue?

**What was your average monthly revenue growth rate over the last 6 months?**
*% of respondents with revenue, $n_{2020}$=168, $n_{2021}$=168*



Legend: >20% growth | 5-20% growth | <5% growth | decline | no answer
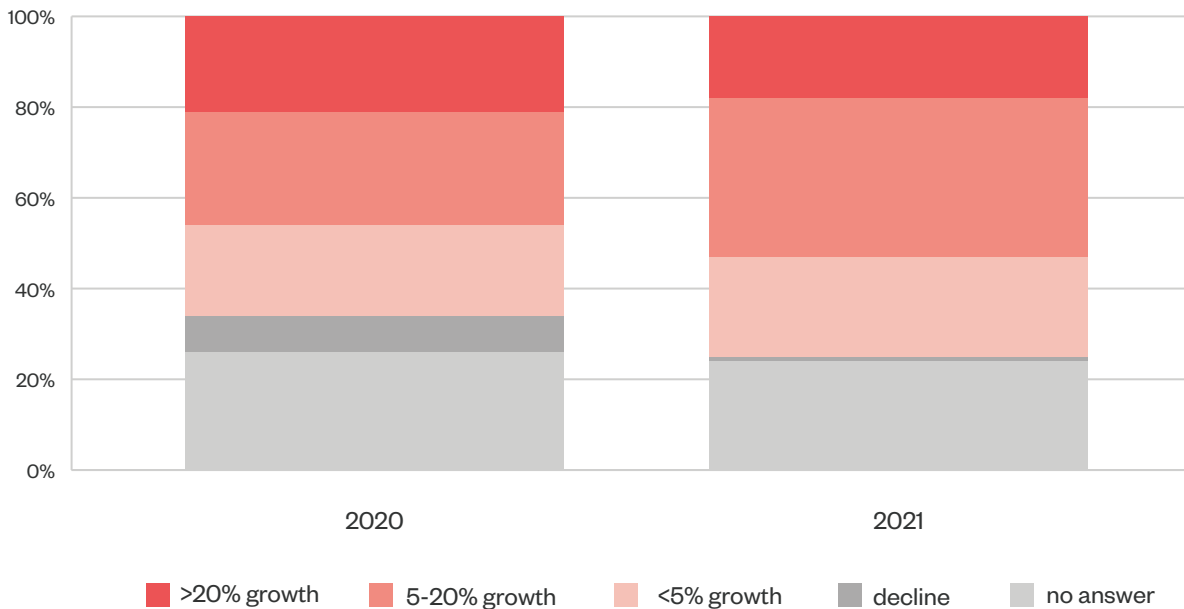
*among champions, n=26, among pretenders, n=44*



champion | pretender
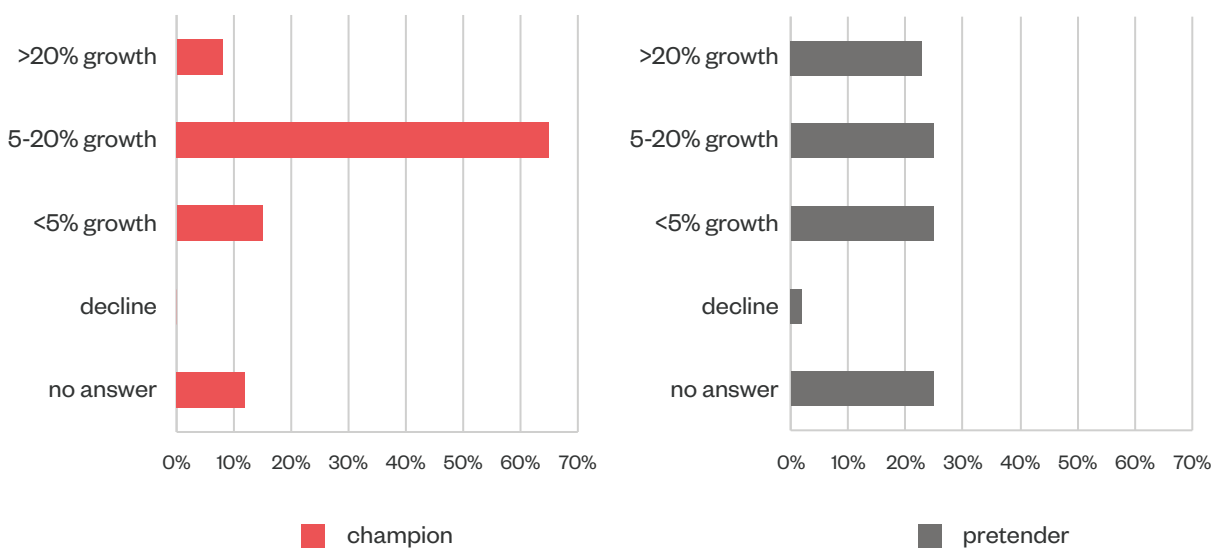
*Source:
Startup Hungary*

**Zoltán Györkő**
ex-Co-Founder at Balabit,
Co-Founder & Board Member
at Startup Hungary

# How to turn a Pretender into a Champion

To briefly summarize the biggest challenges of the above two categories:

- the Pretender aims to find product-market fit
- the Champion aims to build a scalable, effective sales and marketing machine.

It's promising to see 10 new companies reaching the champion status and to see a significant drop in the number of pretenders from 75 to 54. Compared to last year's survey, there was greater fluctuation in the Pretender category, although over 20% of 2020's pretenders were able to find traction and grew out from the category, most of them shut down the business. It's completely natural that many early-stage startups run into the ground before reaching PMF. In this phase, there's still a lot of room for mistakes, including the founding team falling apart because it turned out they didn't want the same thing in the end, the solution solving a problem that isn't important to anyone else, or that it turns out others have already done the same thing, but Google didn't spit them out as the first search result.

*If we run into a wall, we pivot. But it's vital to understand when, and how much.*

While the founders are experimenting alongside their full-time job, only time is their enemy. Once they start working from investor money (be it an angel investment or early VC money), the runway also becomes a serious limitation. Time to find PMF is finite, because investors don't finance forever.

*If the pivot is just repositioning and the startup consists of the founding team, the job is easier. As the pivot increases in time and size, the chance for success decreases.*

You can't make a hard right with an armored ship. If I hired developers for a specific technology, and the marketing team creates lead gen processes for a B2B enterprise client list, then pivoting to a self-service, small order value B2C means switching out a big part of the team because the current one is not right for the new strategy. Firing people from an early-stage startup creates an even bigger break. Not just because of the delay in recruitment, but also because of the damage to the culture.

Battery Venture partner Neeray Agraval described the T2D3 model in 2015, stating that a startup ideally has less than 10 employees, and founder led sales should reach 200k MRR in the typical 2 years after the MVP is launched to reach PMF (Pretender). After this is reached, simply triple this amount twice, double it three times, and you have the 1B valuation (Champion).

Not to be misunderstood, the T2D3 is an idealized model and successful companies, big exits can be built even if we don't grow at this pace. Nevertheless, it's a good representation of the maximalist mindset of VCs.

*While 100-200k MRR is building up, it doesn't matter if the product is purchased by different customer profiles that seem to arrive by accident from different channels, attracted by completely different value propositions.*

This phase only proves that there is some sort of value in our hands, we're capable of getting this across the entire sales process, and at the end it becomes credible that we have PMF. (The basic T2D3 assumes 50-60 clients with 30-80k annual subscriptions. Naturally, different numeric goals will change the KPIs as well).

*Finding PMF is a mix of art, intuition, and luck - though there is a lot of literature on helpful practices. The successive growth, T2D3, is an engineered process that requires investment, precise timing, and effective recruitment.*

There should be investment. The right amount, at the right time, preferably in the fastest amount of time possible. If the CEO/founder spends more time than needed with VC pitches, they pose a serious risk to growth.

Timing the growth of the sales-marketing machine is a matter of strategy. We have to understand and design our go-to-market roadmap to see how far ahead we need to work on marketing positioning. The aim is to have enough MQLs (marketing qualified leads) arrive to hit the strategy's expected growth rate, and to have just enough experienced salespeople (from our own value proposition) to handle the leads, so that if the enterprise sales cycle is 6-9 months, the revenue needed to double arrives in time as well.

The growth dictated by T2D3 is not realistic without extremely effective recruitment. However much it hurts, it doesn't support the nurturing of leaders, professionals, from within the company.

*It's no accident that most unicorns are built by serial entrepreneurs equipped with experience and strong recruitment pools made up of ex-colleagues, previous startup employees.*

What can a startup entrepreneur building their first business do? Perhaps the most important action (and the one that I learned from the Balabit story), is that the CEO accept that a large part of their working time needs to be spent with recruitment. Not by reviewing CVs, but by working themselves into the community, where the talent that they need works. They constantly have to follow similar startups, the competition, and their key people (by commenting on Linkedin or across beers at a conference), and lead a list of the talented people that they would hire at any moment. If a Sales VP is needed, the first step shouldn't be a headhunting agency, but rather checking the list to see if someone on it is free or able to be persuaded.

# Product pricing in the spotlight

**What is the most important factor you take into account when pricing your product?**

*% of all respondents, n=212, champion n=27, pretender n=54*



- we position ourselves to our competitors
- based on how much value we create for the customer
- we set our prices based on our costs
- case by case, no specific price strategy so far
- other
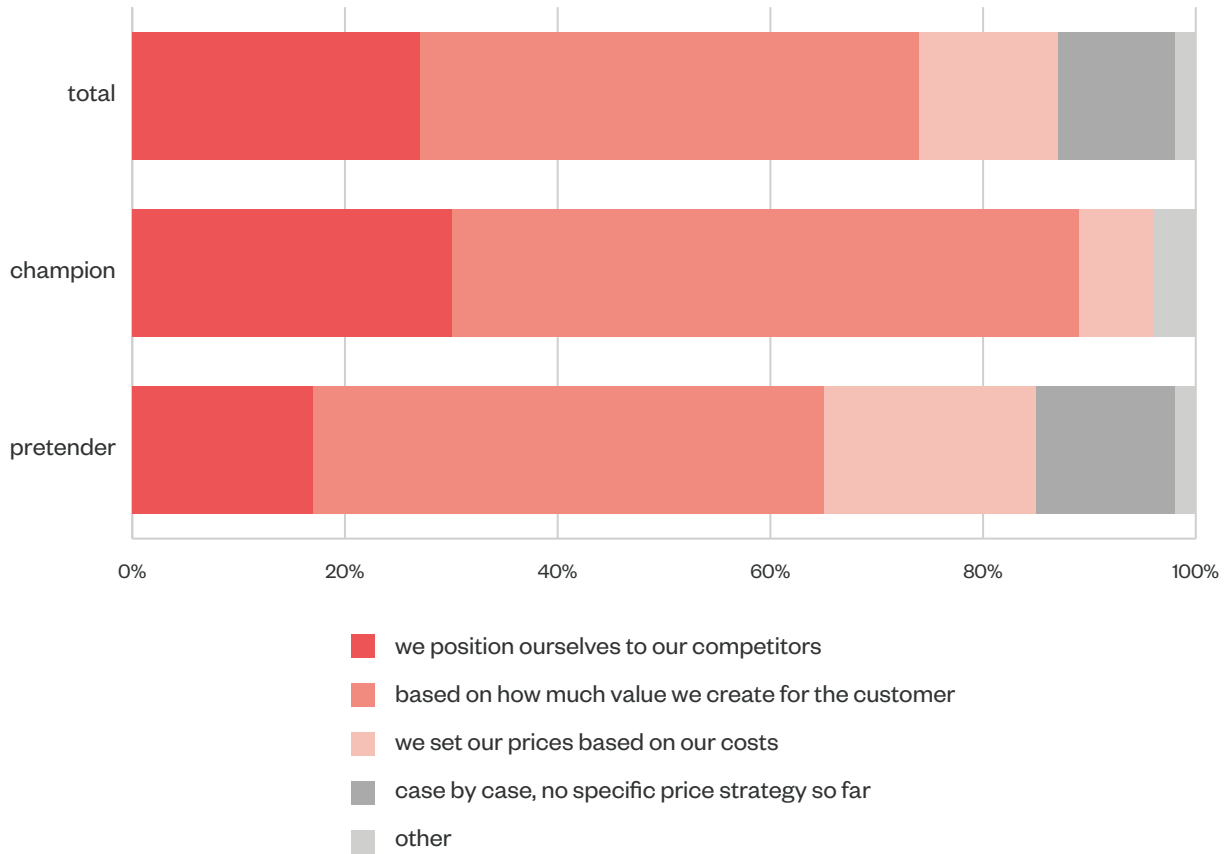
*Source:*
*Startup Hungary*

# Top customer acquisition channels

**Which customer acquisition channels are the most important for your startup?**

*% of all respondents, $n_{2020}=232$, $n_{2021}=212$*
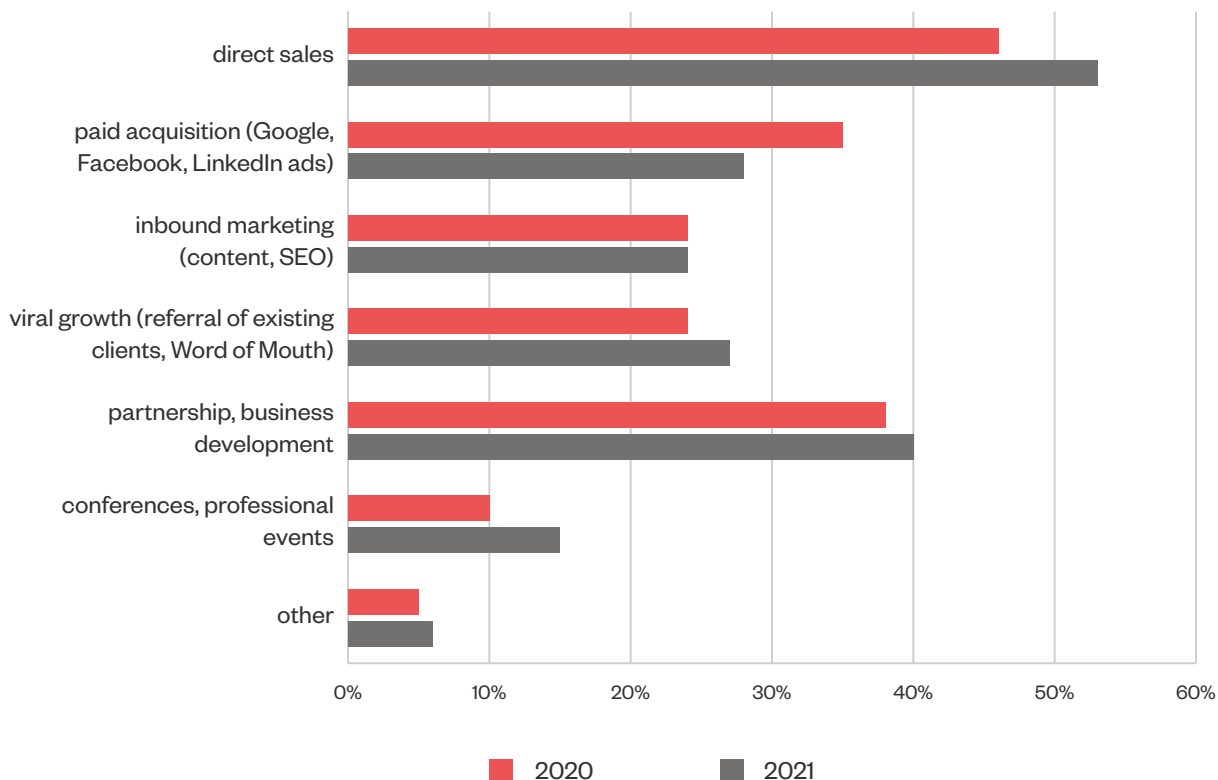
*among champions, n=27, among pretenders, n=54*
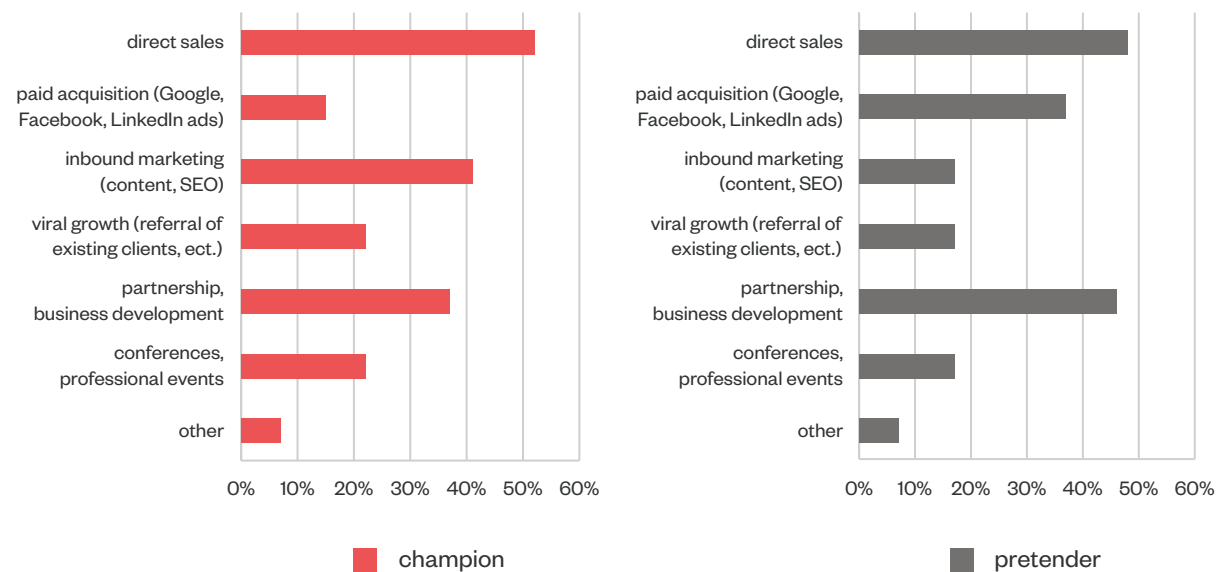
# At what age do tech companies reach product-market fit?

**When did you start your startup and what development stage were you at in 2021?**
*% of respondents / startup age, 1 year or younger=57, 2 years=34, 3 years=33, 4+ years=88*



Legend:
- problem-solution fit
- solution-product fit
- product-market fit
- business model fit, expansion

*Source:
Startup Hungary*
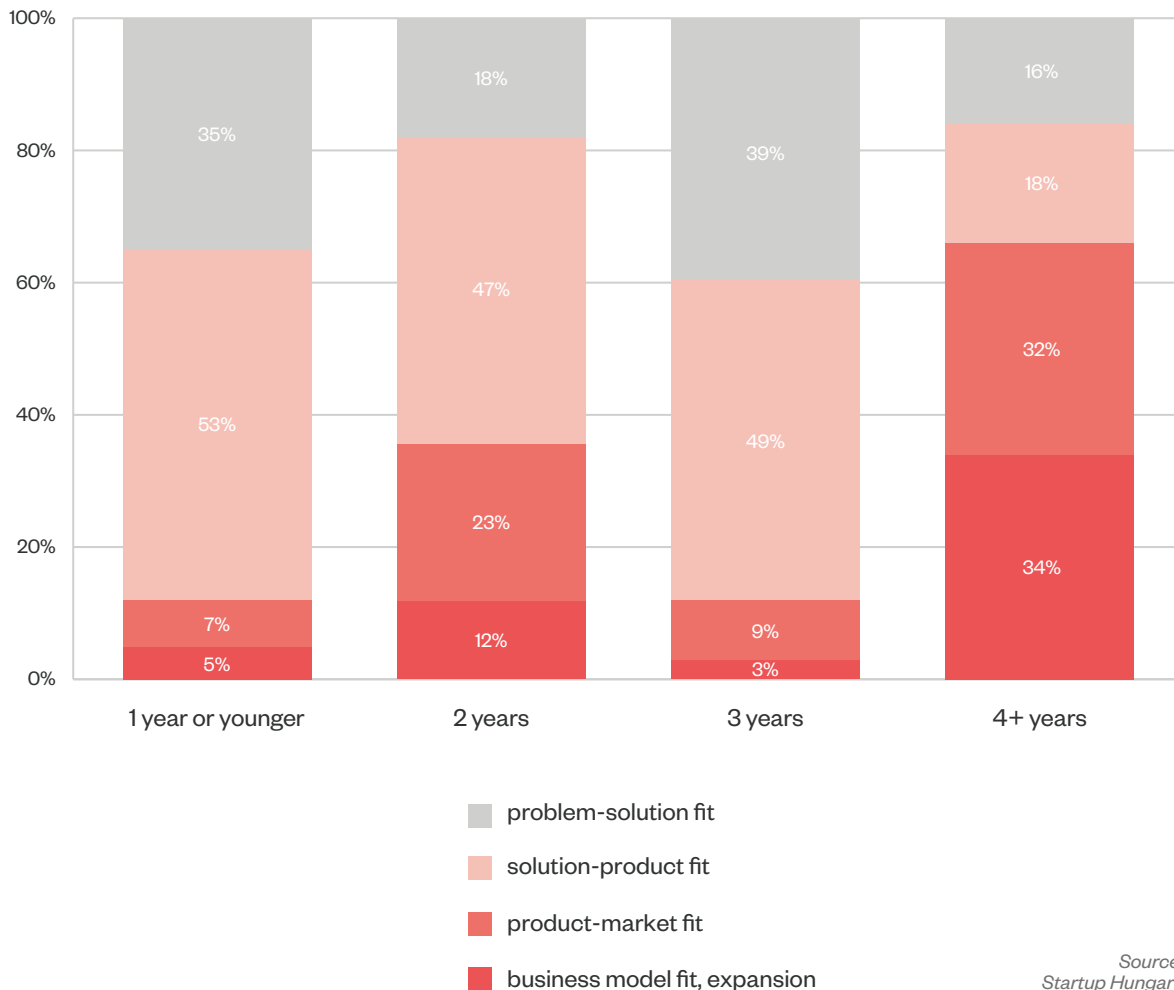
**Attila Kecsmár**

CEO and co-founder at
Antavo Loyalty Management Platform

# Product-market fit is a holy grail worth searching for

I don't know who invented the term "overnight success" but surely it was not an entrepreneur.

Most entrepreneurs learn the hard way that success doesn't happen overnight. For us, it took 10 years of hard work, internal development, and learning from our mistakes to grow to be the 100 person company we are today (and I still wouldn't call this "success").

I am the co-founder and CEO of a marketing SaaS company that helps global brands like KFC, BMW or Bayer run innovative loyalty programs. In 2021 we achieved 3x growth in a year, but the path to get here was not easy, and I am sure that reaching the next milestone for our company will be just as challenging.

- We started off 10 years ago as 4 founders in London. Our business had a completely different lead generation product for a different target audience. Despite the promising launch, it was a lost case, because we ended up competing against Facebook.
- We adjusted the product by adding a 'loyalty points' feature. What was originally planned as a small addition ended up as a whole new feature. Still, it wasn't the fit our original audience was looking for.
- Then we completely rebuilt our product, and in spite of signing with big names such as Toys'R'Us and Pepsico, clients didn't come reliably, so we decided to branch out again. We even built hardware to bring the loyalty experience to brick-and-mortar spaces!

When the digital transformation that followed the lockdown accelerated, it found us ready.

By that time our product was one of the best in the market, and we learned how to serve enterprise-level needs. This newfound interest in loyalty technology was the final piece of the puzzle for finding our product-market-fit.

So what are the takeaways from this story? In my opinion, finding product-market fit has nothing to do with luck. It's a testament to a startup's capability to adapt to the changing tides. If I would have the ability to go back in time to the early days of the company, I wouldn't be able to fastpass our way to success. We could have done things differently, but we didn't know that back then, and needed to walk the same path, to test and to learn.

The team members we initially hired as frontend developers or QA testers have turned into top-level Solution Consultants and Engineering Leads due to the large amount of knowledge they gathered through the years. Even though we had to abandon ideas, we still learned valuable lessons about how the market operates. Carving your own path is what makes a startup resilient and successful.

*So the next time you feel that your business is in a tough spot, don't give up. Instead, try breaking out by branching out!*

# Average satisfaction rates

**How satisfied are you with your startup's development?**
*% of all respondents, $n_{2020}$=232, $n_{2021}$=212*

- very satisfied
- quite satisfied
- it's not bad, but it could be better
- not really satisfied
- not satisfied at all
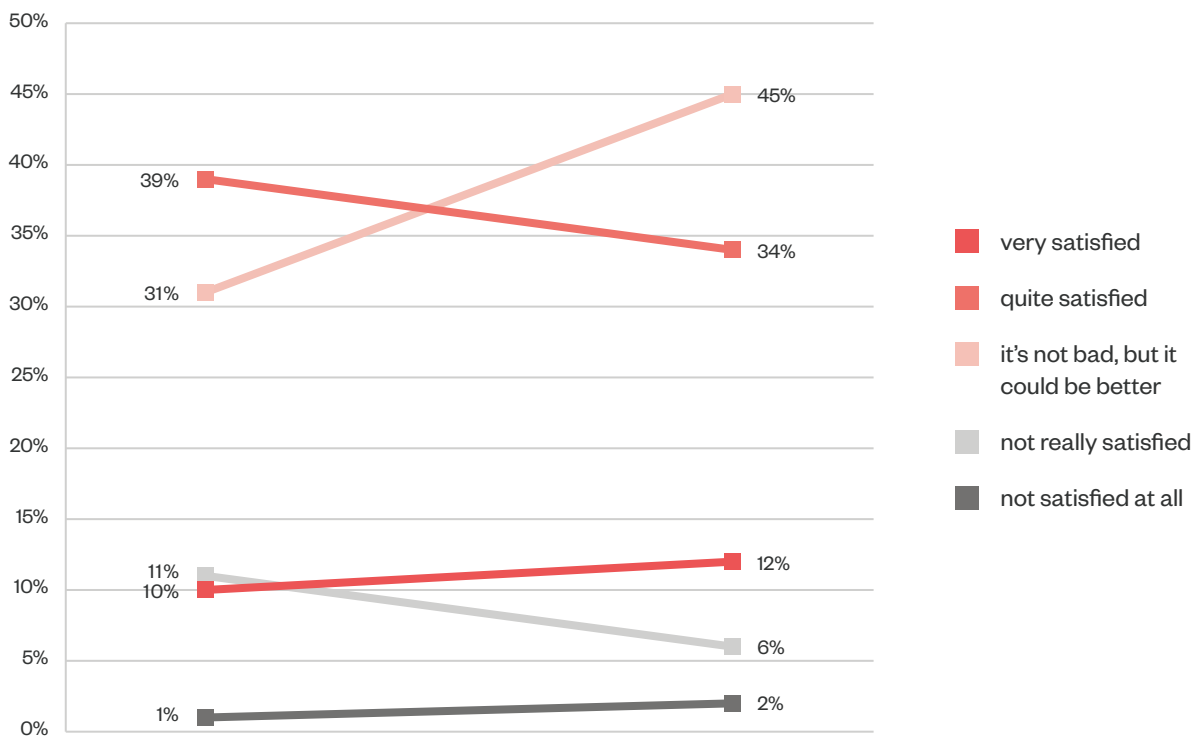
*among champions, n=27, among pretenders, n=54*
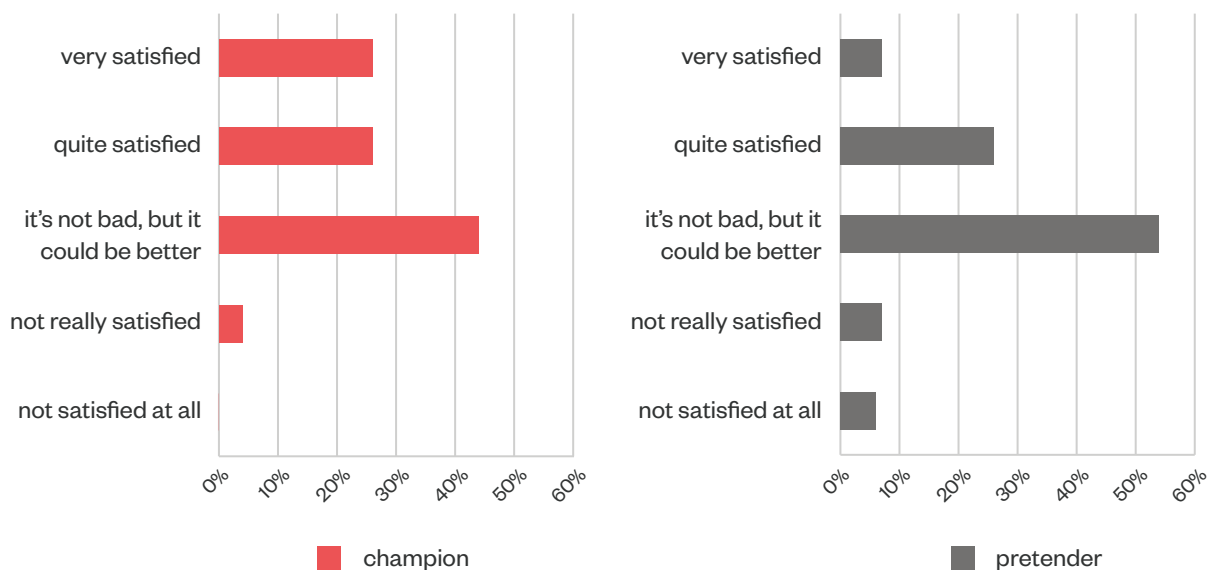
# How much revenue is enough revenue

**How satisfied are you with your startup's average MRR in the last 6 months?**
*% of respondents / revenue level, no revenue yet=44, up to 10k EUR=67, 10-80k EUR=46, >80k EUR=34, no answer=21*



Legend:
- very satisfied
- quite satisfied
- it's not bad, but it could be better
- not really satisfied
- not satisfied at all
- no answer
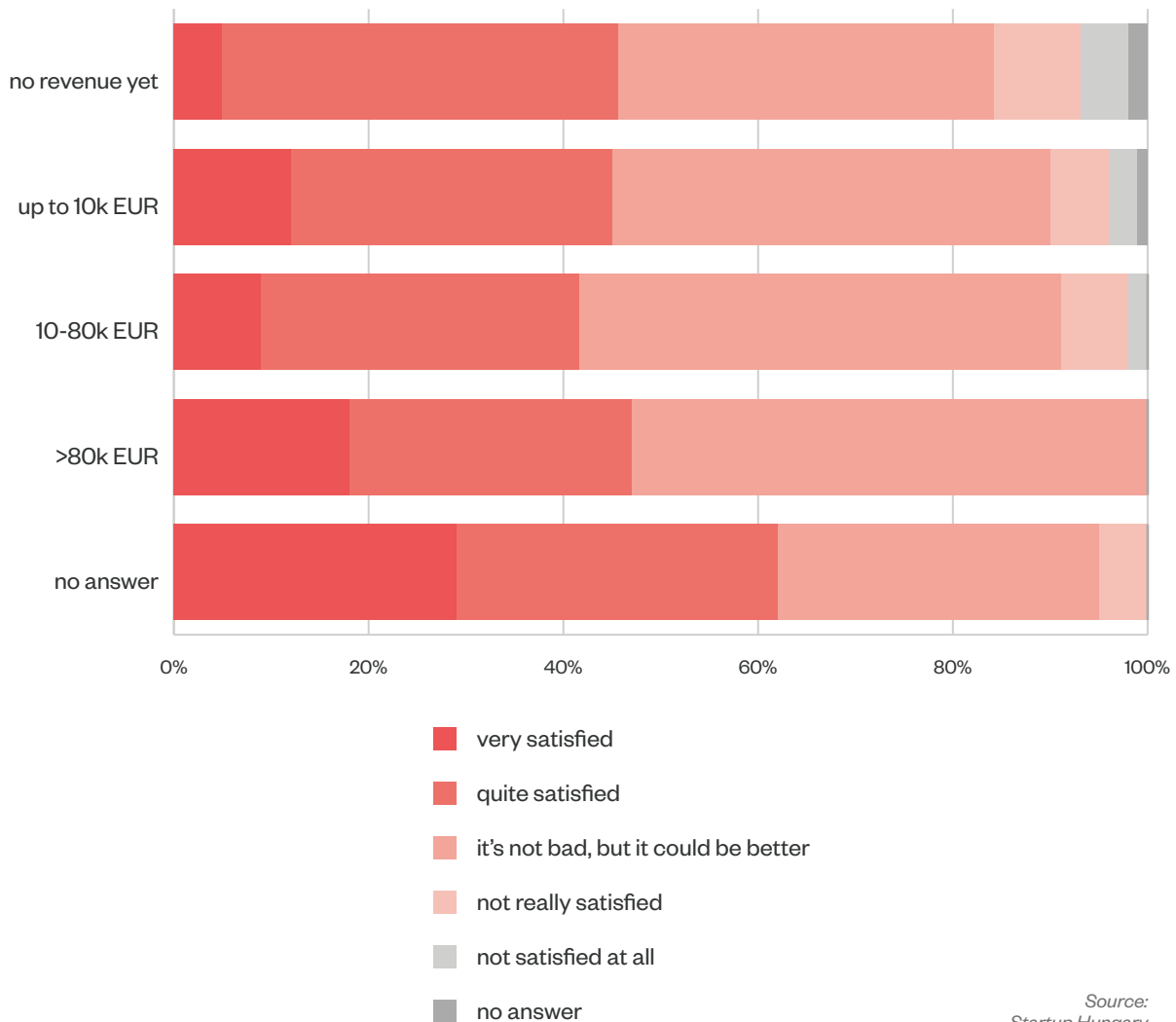
*Source:
Startup Hungary*

# What is a founder's best-case scenario?

**How likely are the following scenarios for your company?**

*% of all respondents with "very likely" & "rather likely" answers, $n_{2020}$=232, $n_{2021}$=212*

Legend: ■ 2020   ■ 2021

*among champions, n=27, among pretenders, n=54*

Legend: ■ champion   ■ pretender
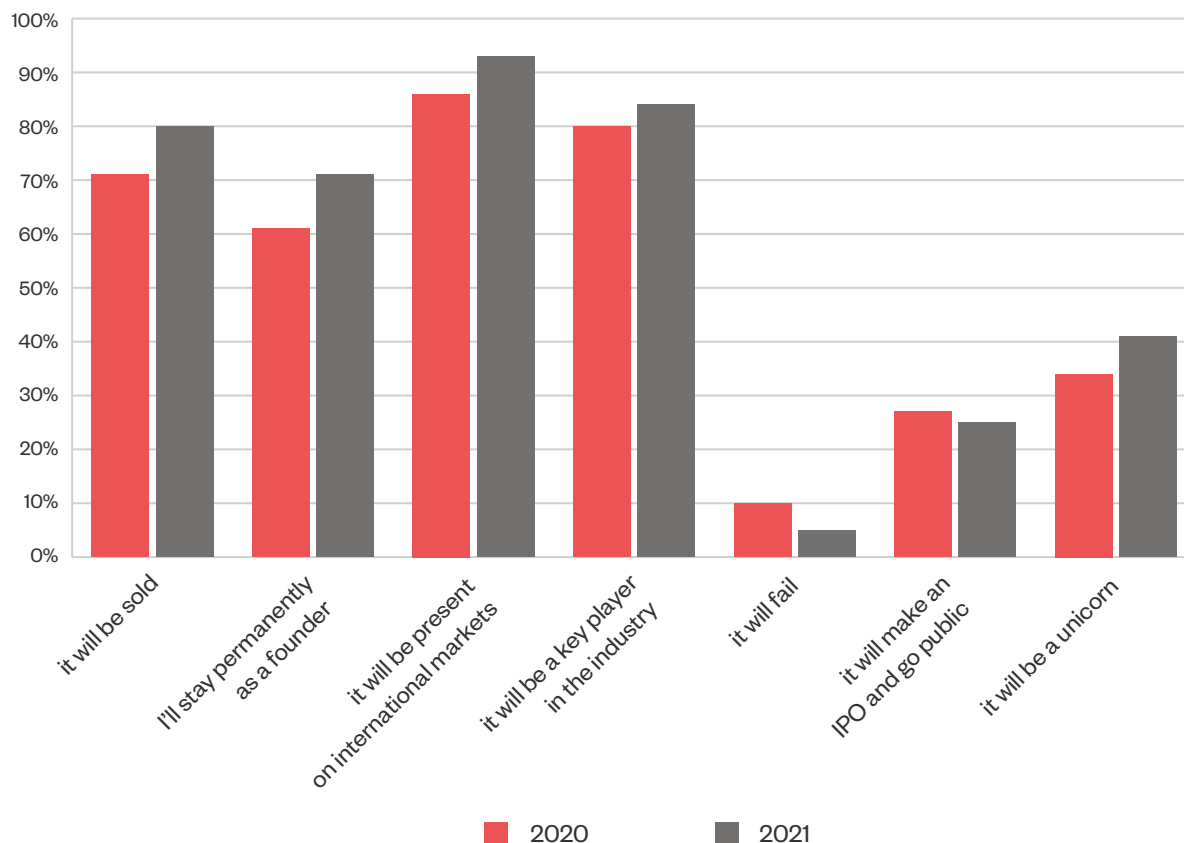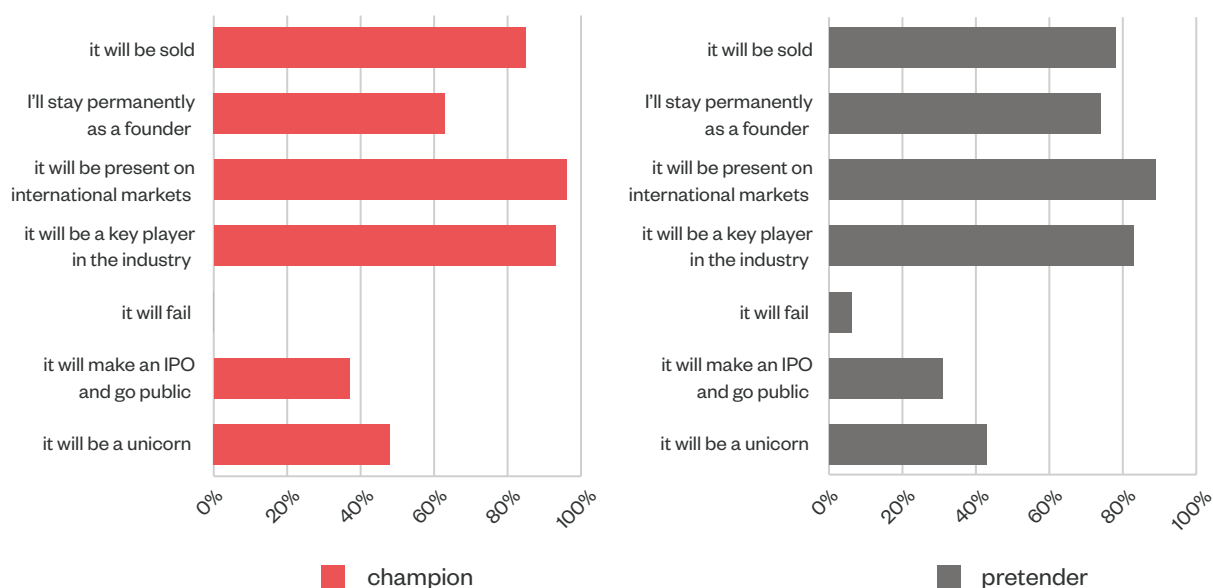
# Funding, talent and access to clients are the most lacking resources

## Which resources do you lack?

*% of all respondents, $n_{2020}$=232, $n_{2021}$=212*



**2020**   **2021**

*Source:
Startup Hungary*
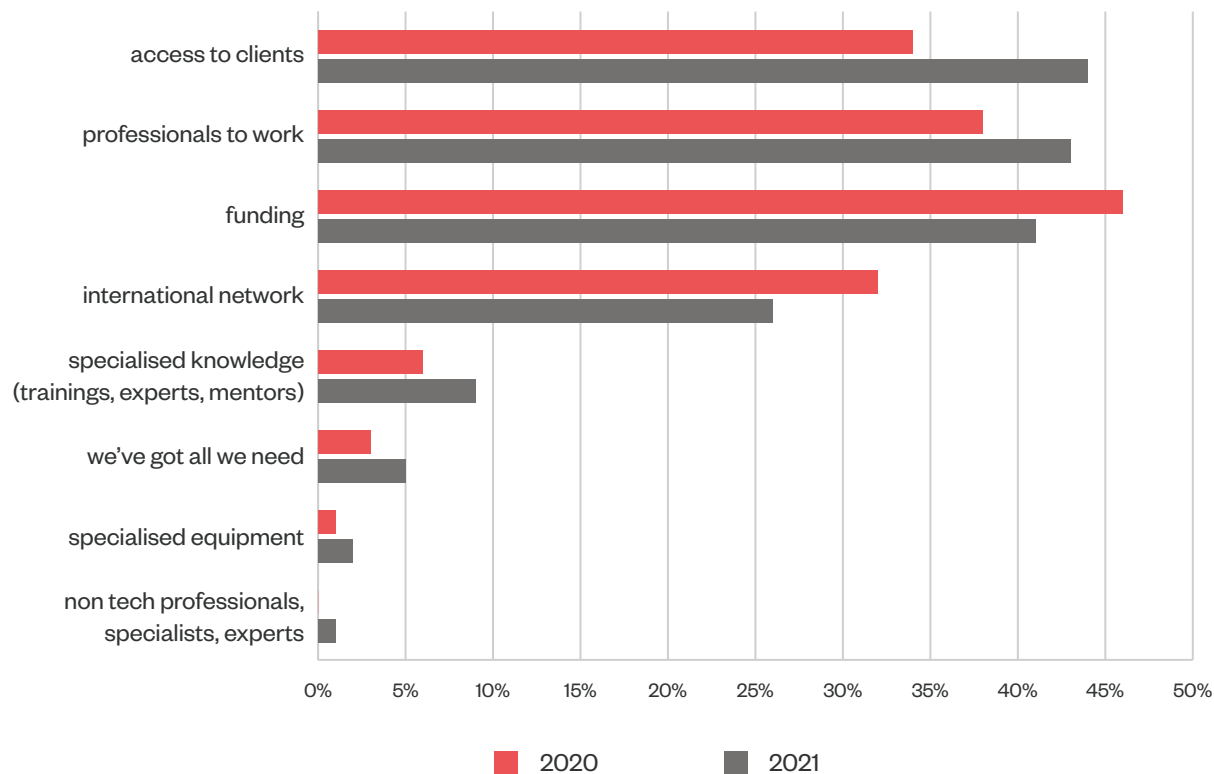
*among champions, n=27, among pretenders, n=54*



**champion**   **pretender**
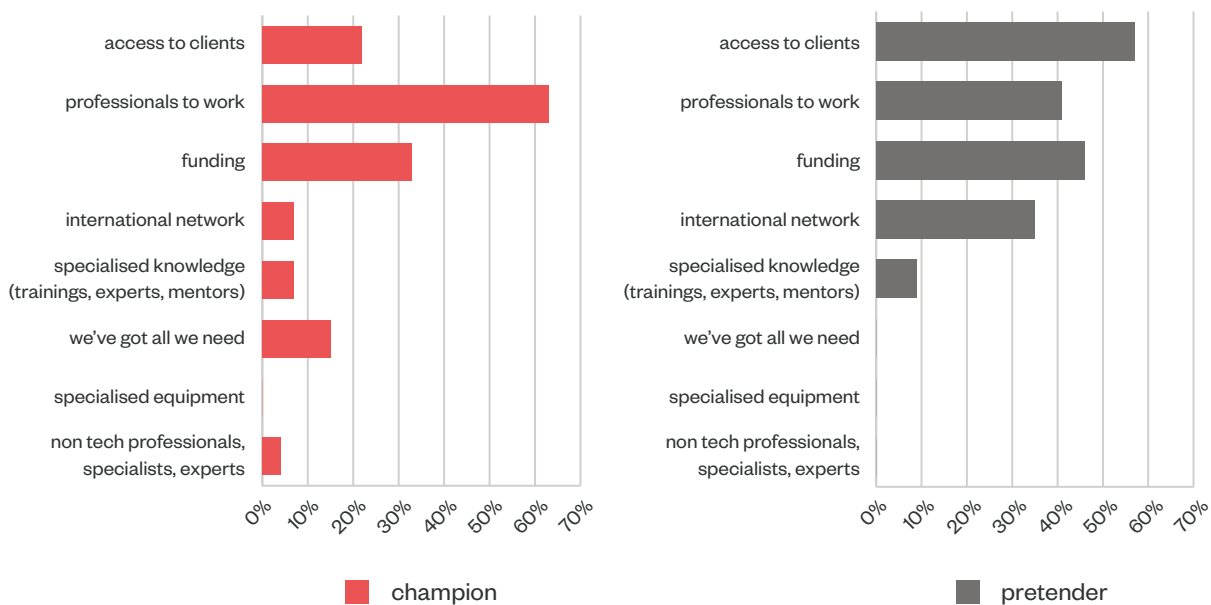
# What barriers hinder growth?

**What barriers make it hard for your startup to grow?**

*% of all respondents, total n=212, champion n=27, pretender n=54*



| | total | champion | pretender |
|---|---|---|---|
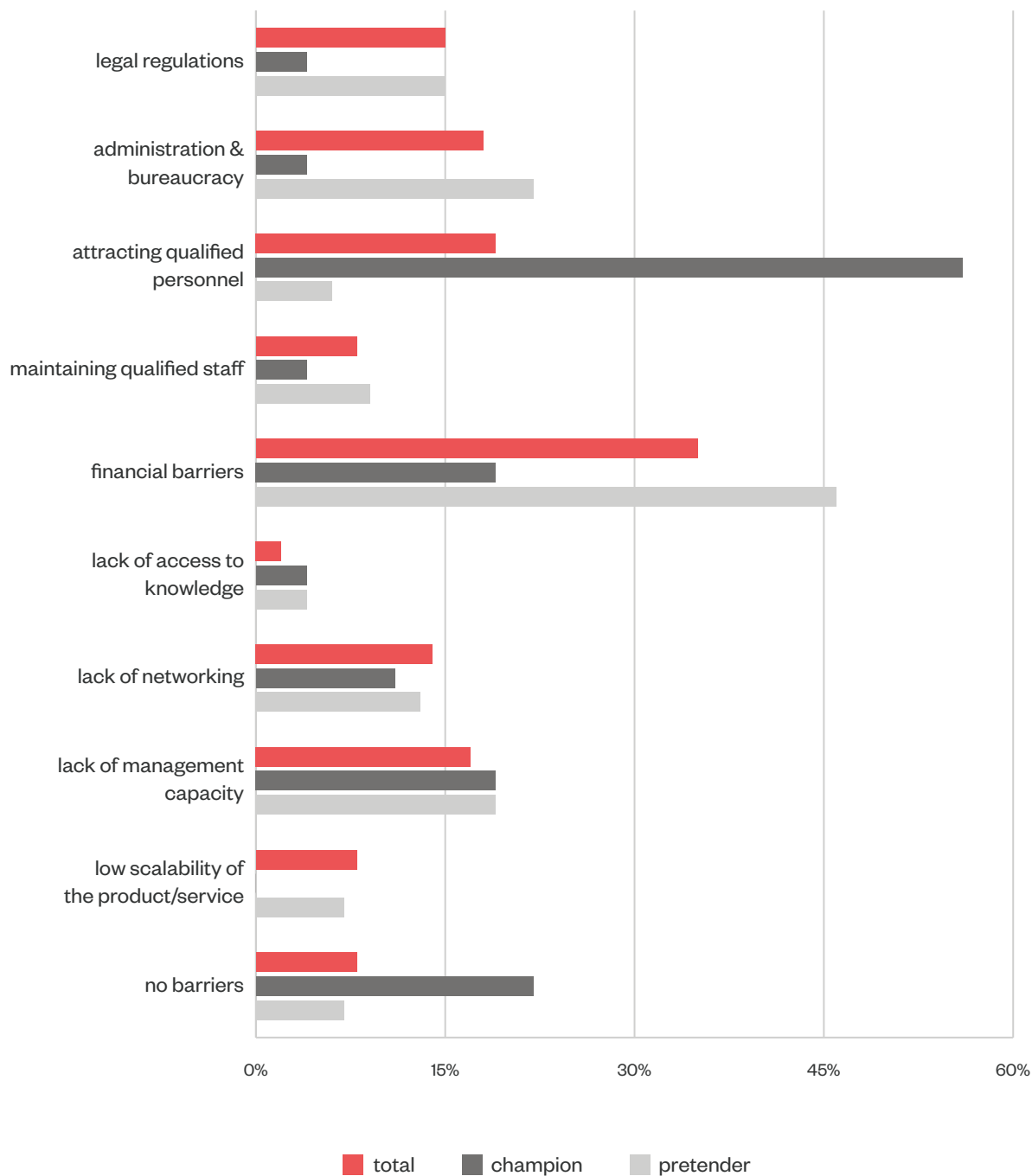
Source:
Startup Hungary

# What are the main challanges in your startup journey?

**What are the main challenges in your startup journey?**

*% of all respondents, total n=212, champion n=27, pretender n=54*



**total**   **champion**   **pretender**
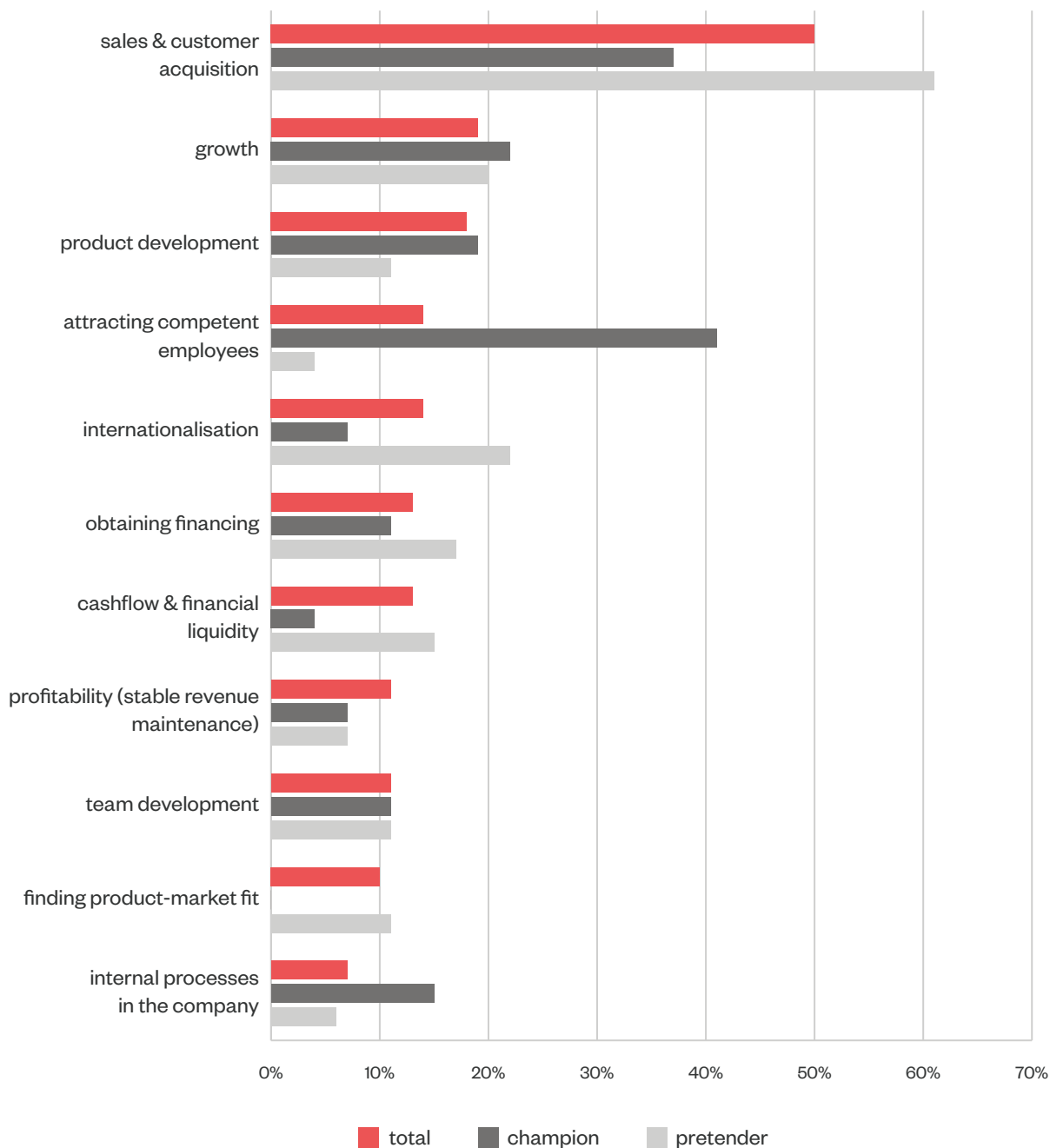
*Source:
Startup Hungary*

**Dávid Weidlich**
eFX Solutions Specialist,
CitiFX, Hungary,
Baltics & Balkan

**Márton Barabás**
Relationship Manager,
Digital Companies,
Citi Commercial Bank Hungary

# Designing scalable finance operations for startups

Digital companies and startups are designed for exponential growth. Some of them take a flying start, while others require a couple of years of product development before they can hit the market. During their journeys all of them have a priority list that is mostly centred around product and sales. Engineering, sales and marketing is always at the forefront when companies are making key hires or deciding on organisational developments. When it comes to finance, we see increased focus on funding and attraction to new investor money at the right valuation. However, discussion around finance should not stop here.

### The role of finance in seed stage companies

At the early stage of a digital company, finance is mostly about bookkeeping and accounting for a good reason. Usually, no expert is hired and most of it is "outsourced." As start-ups keep growing, this model starts to show more and more friction - sooner or later a fix is needed. Finance experts are needed to make processes smoother to enable the business to grow. That's clear.  But how do we solve for it?

When we think about leaders in finance, usually we have a CFO in mind who thinks strategically and manages complex capital market transactions. Finding a great CFO is challenging and might only be required in Series B/C. But before that happens, finance should be built not only as a cost centre but as a solution provider for decision making and operations.

Hardly anyone would argue that internal and external work around accounting and tax should be part of the day-to-day hygiene of any company, including startups, who are starting

from square one. The same is true for cash management, supplier payments or employee related remittances. However, even from day 1 or 2 there should be more buy-in around letting finance accelerate a business.

For example: CEOs often need support in decision making and maintaining investor relations with effective financial planning and analysis (budgets, cash-flow etc.). A VP of Sales might ask for near real-time data on revenue and commission collection or collaboration on selecting the right payment channels.

### How banks can support excellence in finance

Once we define what the role of the finance team is, we can hire someone with relevant work history even earlier than you might think. If startups delay this step, financial processes can easily become "patchworks." There are low-cost tools to solve for most of the problems around finance, but putting them in motion requires a lot of time investment.

Resources (most often time) to initiate process changes are usually scarce. Someone with vision needs to lead the execution. In an ideal world finance should be automated as much as possible with full transparency and real-time data for decision makers and investors. This is a constant battle for excellence that would best serve business scaling.

Choosing the right banking partner is also key to the success of startups. We often see that early stage companies simply go with the bank that is the closest to their office. Most of the time, the simple cash management solutions that a young start-up needs are available everywhere. But as the

company grows, and their banking needs become more complex, a new banking partner might be needed to support the growth of the startup.

A few things to keep in mind before choosing your banking partner: can the bank offer the level of automation in cash management that the company might need in the future? Does the bank have a physical presence in the countries that the company might expand to? Is the bank willing to support the growth of the start up with financing solutions?

**How to increase liquidity at a startup – the banking angle**

We need to understand that banks run the same risk as investors, but while the shareholders' possible return on an investment is unlimited, the bank's return is capped in the interest income that the credit line generates for them. Still, some banks may start to realize that engaging with a young startup can be beneficial for both sides: the clients have access to additional working capital financing, which can help them scale their business faster. The banks on the other hand can establish a relationship with a multinational, fast growing company.

How do banks make their credit decisions when it comes to loss generating startups? A venture capital investment is key. If the start-up is able to attract VC investments, it means that they have a viable business plan, and a product that is, or is going to be, generating income. Analysing the past performance of the company is limited to key industry standard ratios like customer acquisition costs, churn rates, and most importantly, the rate of growth of the company.

If a bank sees that the sales of an early-stage company is not doubling year over year, they might not be interested in the deal. If the growth is significant, and the basic industry standard ratio requirements are met, then banks need to have a look at two things: the amount of cash that the startup has, and their plan on spending it. The reason again is that the return on the credit is limited for the banks, hence they are more risk averse. If the startup has enough funds to last a year, but still expects to have periods when their stretched liquidity position could be improved with working capital financing, or they could simply achieve some benefits from their suppliers by changing their payment terms, a short-term banking financing can be a viable option.

**Citi as a preferred partner of fast-growing digital companies**

Citi has made huge efforts over the last 10 years to offer the most needed services to digital companies.

> *The global network of local Citi branches helps to reach more customers in a cost-effective way and comply with local banking regulation with local Citi support.*

This is all accessible from Hungary via the Hungarian coverage team. Citi's single global banking platform can help digital companies build host-to-host connection once (even via APIs) and manage accounts centrally. Increased visibility and decreased manual work should help finance teams to focus more on value creating tasks and growth.

# How corporations help startups grow

**Do you collaborate with a large corporation?**

*% of all respondents, $n_{2020}$=232, $n_{2021}$=212*



Legend: yes | no | planning / negotiating | no answer
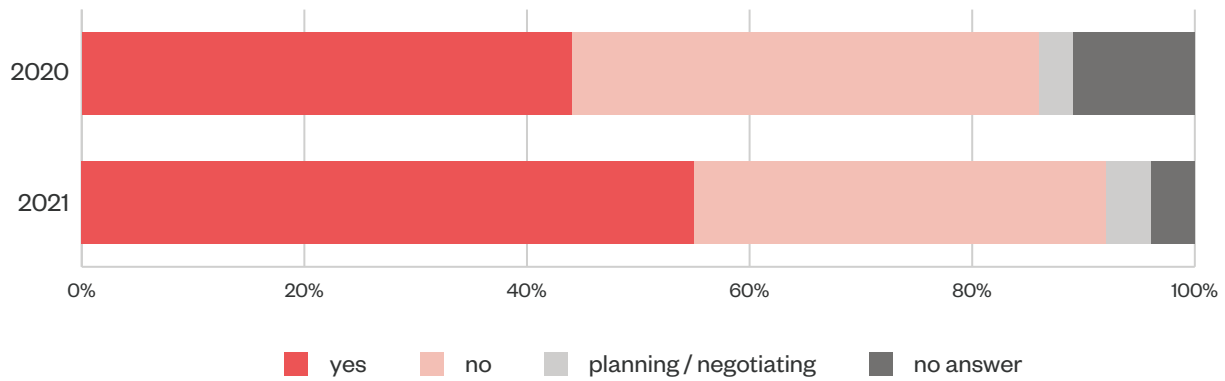
*Source: Startup Hungary*

**How would you rate your cooperation with the corporation?**

*% of respondents collaborating with large corporations, n=117*
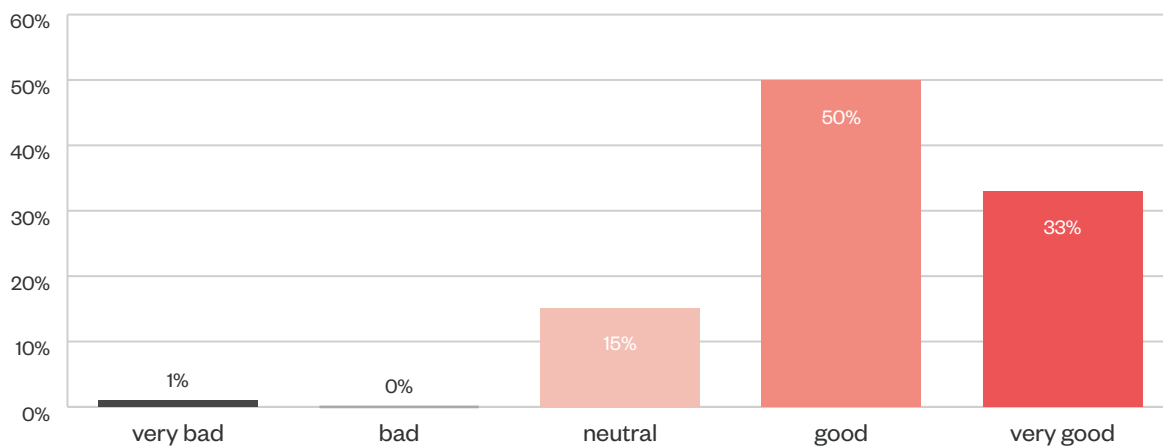


*Source: Startup Hungary*

## Describe the relationship with your corporate partner

*% of respondents collaborating with large corporations, n=117*



the corporation is our strategic client

we use the technology of a corporate partner

we license our technology to the corporation

we use the R&D infrastructure of a corporate partner

together with a corporation we create innovative solutions

we use partner's distribution / sales network / customer base

the corporation promotes our solutions

we use partner's other resources

we launch common ventures together (marketing / PR)

we are / were in an accelerator / incubator with strong corporate involvement

we have corporate mentors

a Hungarian corporation has invested in our startup

a foreign corporation has invested in our startup

a Hungarian corporation has taken over our startup/ team

a foreign corporation has taken over our startup / team

0%   10%   20%   30%   40%   50%   60%   70%

*Source:*
*Startup Hungary*

# Startups vs. the government

**In which areas do you want to see increased governmental support?**
*% of all respondents, $n_{2020}$=232, $n_{2021}$=212*

Legend: 2020 / 2021

*among champions, n=27, among pretenders, n=54*

Legend: champion / pretender
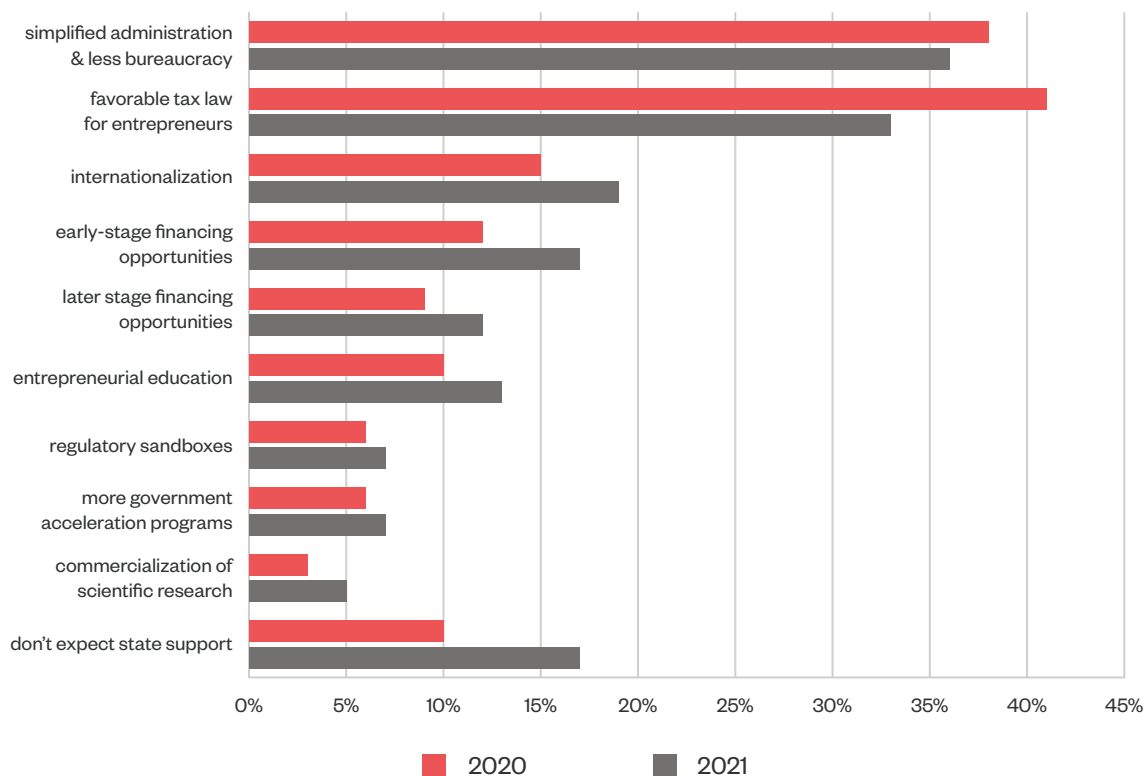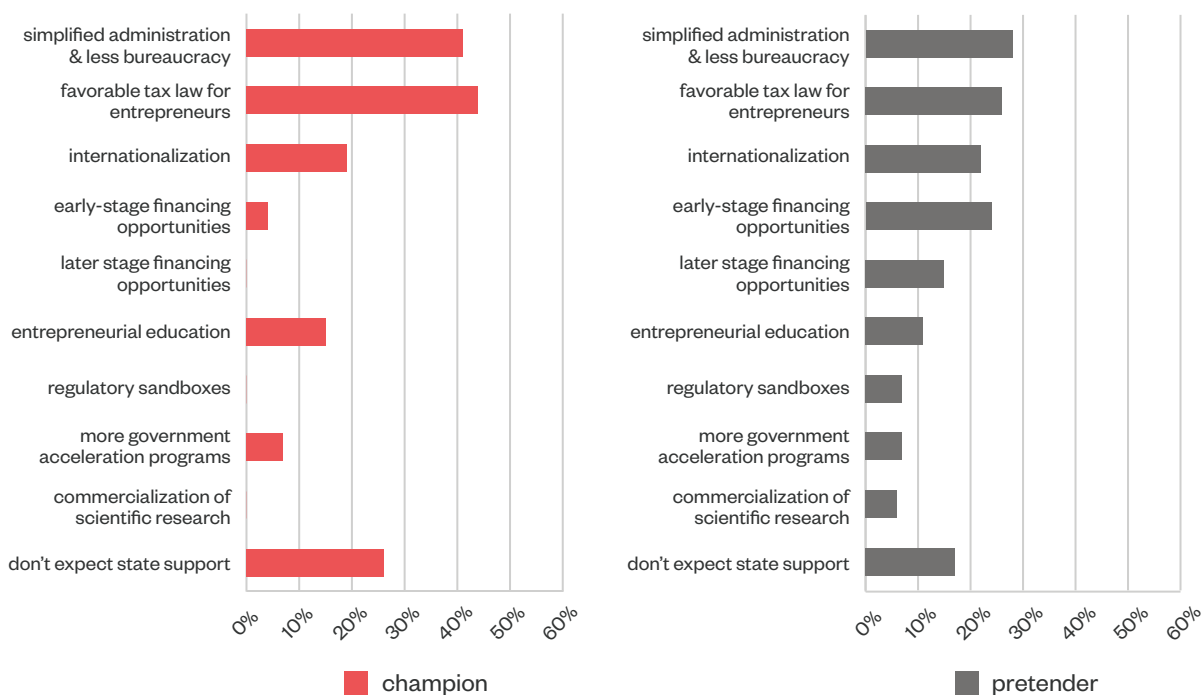
**Andrea Kozma**
Director at CEU Innovations Lab

# Learnings from incubating early stage startups in Hungary

Being a startup entrepreneur has become a popular theme in Hungarian media. Great stories of cool solutions, young ventures raising venture capital funds, setting their eyes on foreign markets feature in business and popular magazines. We hear founders talking on the radio and podcasts, and even in reality tv shows where idea owners can convince angels to invest in their projects and partner with them.

There is plenty of money on the local market – overwhelmingly in state funded venture capital firms – there are meetups, events, hackathons, there is buzz, excitement, so hey, let's go start a startup! Startup support organizations, competitions, conferences are plentiful. There are soft landing programs (on a halt during COVID) so why not take advantage and go to Silicon Valley? Let's follow the gold rush movement to the West Coast, invent the next big thing, become rich and famous.

This is the narrative that attracts many young people to try themselves out in startup world, with the belief that it is our talent and our talent alone that will define our future.

The storyline originated in highly successful startup ecosystems, and now we want that Coca-Cola feeling here in Hungary, Central Europe too.

Under communism, Hungary had the most advanced entrepreneurial culture in the CEE region. The "Gulyas Communism" system permitted a certain level of commercial activity. So you would expect that the Hungarian entrepreneurial ecosystem had something to build on, that we have a certain entrepreneurial attitude, and that all we needed was a ton of seed funding to arrive in the ecosystem and instantly hordes of young enterprises would take off.

*It is a bit surprising that Hungarian search results show only 4,000 hits for the word "startup".*

The last time Hungary was featured in the Global Entrepreneurship Monitor - the leading annual entrepreneurship ecosystem report - was in its 2016/17, which showed that entrepreneurs hold very low social status in Hungary (3,75 out of 9 dropping to 2 in 2018), ranking us #61 in the surveyed 65 ecosystems that year.

So we have an ecosystem with about 4,000 potential startup founders who can expect a low social status, unless they become wildly successful. Indeed the word, "vállalkozó," - the Hungarian word for entrepreneur - shows a higher search rate, but startups are new ventures with global ambition, so the "vállalkozó" search likely yields potential entrepreneurs who have language barriers and are probably SME founders.

Low social status means that young people with a high quality education are more likely to choose a career in established global companies which are more in line with family expectations and overall social status.

We all know the story of the Thiel Scholarship, a scheme created by PayPal founder Peter Thiel, offering

100,000 USD to college students who drop out of school to work on their BIG IDEA. There is a participant quote on their website which says: "My grandmother wanted me to have an education, so she kept me out of school." You may interpret this as a criticism of US education, but the point here is actually the attitude: entrepreneurship is about celebrating exploration, action, self-realization.

*So is it fake news, that Hungarian startups are conquering the world with the strength of Hungary's innovation and talent? Well, it's certainly a kind of wishful thinking.*

The reality is, that only a very small number of young talent is headed towards the entrepreneurial career path, and many of those who do entertain the idea are in the ecosystem for the wrong reasons.

**Too much money**

The first batch of state venture funds arrived to the Hungarian ecosystem in 2007 in the form of Jeremie Funds. The nascent venture capital sector lacked experienced, expert fund managers, and the absence of an arms-length relationship between the fund provider and fund management resulted in investment practices that only remotely resembled developed venture capital ecosystems.

The Széchenyi Tőkealap arrived on the market in 2011 and Hiventures in 2017. As a result, the Hungarian venture capital market is currently 87% state owned, almost completely crowding out private investment from the venture capital market.

*Relative to its GDP, between 2007 and 2016 Hungary has provided 2.5 times more state aid to entreprises than the EU average (Jáki, 2019).*

In this period of time, a new generation of entrepreneurs arrived to the scene who identify the concept of entrepreneurship with a process of application to state funds. Given the very low level of entrepreneurial activity and small number of potential startup founders, this means that, in theory, there is more than enough money on the market to get each and every startup applicant funded. In

developed ecosystems less than 1% of startups acquire venture capital funding. This is partly because of the strict investment criteria of the investors, but also because, simply put, not all startups need to be venture capital funded.

Many founders would do better to bootstrap their way to the market and finance early growth from revenue. In a healthy ecosystem, venture capital financing is part of the founders' growth strategy: they have a clear vision about how they want to accelerate the growth of a validated product.

**The entrepreneurial attitude**

There is a lot of discussion around whether entrepreneurs are born or made, what their personality traits are, and what makes people entrepreneurial. If you think about the inspirational successful entrepreneurs, such as Steve Jobs or Richard Branson, what makes them different from others is their attitude to experimentation, risk taking capacity, and drive for independence.

Entrepreneurship is not only about business. It's a way of life, it is about how you act and think. In an ecosystem that encourages aspiring entrepreneurs to start their journey in a state bureaucracy, the entrepreneurial attitude is discouraged. The startup journey will be reduced to managing administrative reporting processes in which the individual actions of the founders will be constrained and the focus from the product and the experimentation will shift to managing relationships with bureaucrats.

**The mentoring process**

State fund investment agreements require that the startup founders engage a mentor, and that they define the role of the mentor as a person who helps the funded startup and meet its reporting obligations to the investor. The role of the mentor is thus reduced to an aid, who is paid from the raised fund to help the startup meet its investment agreement obligations. This has consequently created a pool of career mentors who consider mentorship a paid job, whose role is to make up for the investor's lack of portfolio management expertise.

**Challenges in the incubation phase**

*Inspiring motivation*

Nurturing a new generation of startup founders with inherent personal motivation to build something from scratch is the

biggest challenge of our ecosystem. We need founders who consider entrepreneurship as their choice of career. We need people who have a high level of confidence to act, experiment, learn and incorporate learning in the process of product development. People who believe that they can succeed without state aid, who know that they are the ones that can prove the validity of their product.

We need people who are resourceful: they know what they are good at and how to exploit their expertise, people who know how to forge partnerships in early stage venture development, and are open minded and hard working, who prefer to rely on what they know and what they have.

### Nurturing quality ideas

A typical phenomenon of early stage startups is that they fall in love too fast with their first idea. Experienced entrepreneurs have the skills to identify business and innovation opportunities on an ongoing basis, they see many potential opportunities, and push ideas quickly through the validation process. If the idea proves to be undesirable or unfeasible on the market, they can move on to the next idea and incorporate the learnings from an earlier, unsuccessful product into the next, better idea. It is this iteration process that, when mastered, sets the stage for the next, more successful project. The starting point should always be a search to answer the question: what is the problem, how do customers currently solve the problem, and how many people have this problem? Is this a big problem for many people or is it a small problem (inconvenience) for a few people (niche)?

### Building a team

We often see idea owners apply to incubation as solo entrepreneurs. All ideas require a set of expertise and personalities to fully develop them. The idea owner might be a brilliant software developer, but they'll need someone with management skills, another with sales and marketing expertise and more, to actually get the product to market.

Often, founders think that they need to acquire all the expertise themselves, or prefer hiring the expertise they do not have, rather than partnering with someone who shares their vision. We often see that state funds are targeted to cover the cost of hiring the expertise that the founder is lacking.

But this strategy begs the question:

> **If the founder is unable to convince partners to join in the journey and be open to share the upside with them, why bother to go for funding to make up for the lack of a team?**

### Talking to customers

No matter how much founders think that they're solving a big, real problem, they also need to ask their customers and hear what they have to say. Talking to real customers seems to be the hardest job to do for most of the founders. They prefer to send out surveys and launch FB or Linkedin campaigns rather than have a real, human conversation with their potential customers.

Fear of rejection or negative feedback holds startup founders back from going through the systematic, repeated process of customer interviews. These interviews are extremely valuable resources of information about how customers think, live, and what problems they face: these are data sets that need to be analyzed and solutions adjusted based on the learnings. This process needs to be ruthlessly honest: founders should put aside their personal biases, and truly listen to what their customers have to say.

### Networking

Early stage startup founders are short on resources. Therefore, they need to be extremely efficient with the resources they have at hand. Mining the people in their network, their startup peers, is an exponential opportunity to broaden their pool of resources. They need to go out and talk to people about their idea and the problems they are trying to solve. They also need to network with people who are very unlike them: they will probably provide feedback, ideas that would otherwise not occur to the founders, simply because they think and view things differently.

We see a significant correlation between startup progress and founder networking behavior: founders who interact regularly with peers and are active in the wider ecosystem show a more steady and faster progress compared to the introverted, shy, home-office-founder.

### Embracing mentor feedback

No one is born to be an entrepreneur. Similarly, no one is born to be a mentor. These roles require practice, personal attitude and certain behavioral standards. Mentors in an incubation process need to be recruited and screened in a similar process to startups. Expert entrepreneurs rely on their own resources and organize them in an experienced way. Similarly, mentors should not take up the role of a mentor as a source of income. Good mentors are experienced professionals who are at the stage of their career when they can afford to - and want to - give back.

> **Great mentors want to be mentors, because somewhere in their personal history, there was someone who helped them, and now they want to help too.**

Good mentors also consider the mentoring process a mutual learning opportunity, and take personal responsibility to dedicate time and attention to the startups they mentor. They also need to be honest about their personal motivation and avoid screening investment opportunities or seaking board membership opportunities in the guise of a mentor. Mentor and startup founders need to build an honest, trusting and responsible relationship to mutually benefit from the process. Startups can benefit the most if they come prepared to mentoring sessions and have the open mind to listen to honest feedback. A great mentorship provides them with a tremendous learning opportunity and emotional support.

Jáki, L. K. E. (2019). The impact of state intervention on the Hungarian venture capital market. *Economic Research-Ekonomska Istraživanja*. https://doi.org/https://doi.org/10.1080/1331677X.2019.1629979

**Richárd Wenczel**
Senior Manager at Deloitte,
Startup Mentor

# Successful startup ecosystems require healthy cooperation between corporations and startups

Besides encouraging entrepreneurship, creating a supportive regulatory and financial environment, and educating startup entrepreneurs on international and scalable business, ecosystem builders also have to develop healthy cooperations between startups and corporations.

But how can we balance this seemingly asymmetrical relationship?

Let's start with some myth busting. First off, this relationship is not necessarily imbalanced. Benefits for corporations vary from boosting their innovation capability by adopting a startup mindset to the other side of the spectrum - including startups' services or products into their offerings. These are the two extremities of the scale. But there are lots of other opportunities in between: co-creation, client-satisfaction enhancement, prototype or market validation, just to mention a few.

Startups may have access to a specific market segment so they can validate their problem statement, solution, product, or business model; they can learn sales and marketing techniques, or receive technical support for their product development. Of course, acquiring their first referenceable client would be the greatest benefit.

*Calling all startups and enterprises! Please reach out to each other and try to figure out the best way to partner!*

Before initiating or engaging in a cooperation, both sides must be 100% clear on their goals and focus - with the active help of mentors and experts. They should define what they want to achieve by entering into a partnership and how it would help them reach that goal. And they have to stick to that focus. The temptation is great during the cooperation to set even newer goals or raise the bar, but that will fail.

Both parties have to respect each other. Corporations should look at the startups as experts in their domain, while startups should not be underdogs or subservient just because the big corp is willing to talk to them. Value for money! If you think you can deliver or gain value, just determine the price for it, as two leveled partners.

I hope we'll be able, in cooperation with supporters and partners, to enable a couple of corporation programs to help both startups and enterprises meet their goals .

# Startup Financing

# Today's fundraising scene

## Perception of change in available capital

*% of all respondents, total n=212*



| | 1 year ago | 5 years ago |
|---|---|---|
| easier | 19% | 46% |
| harder | 9% | 8% |
| the market didn't change | 26% | 2% |
| no answer | 46% | 44% |

Legend: ■ easier  ■ harder  ■ the market didn't change  ■ no answer
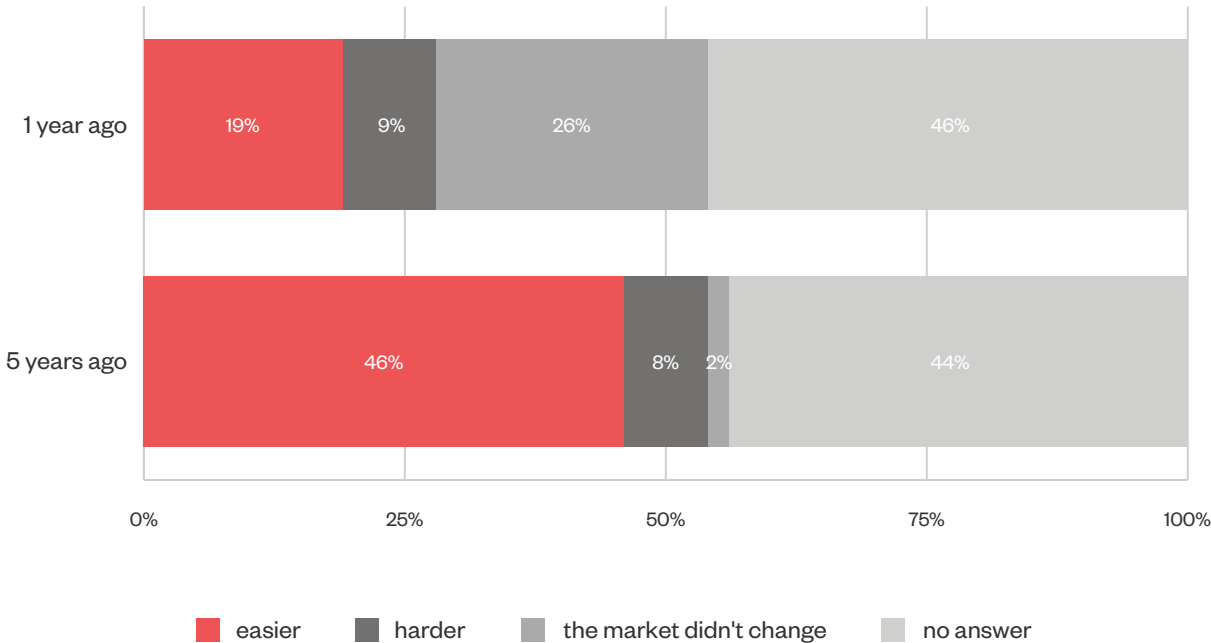
*Source:*
*Startup Hungary*

**Zsolt Weiszbart**
Partner at Day One Capital

# Living in a bubble

In January, after almost two years, I attended an event at one of my portfolio companies in downtown Budapest. I was amazed by the energy in the room. It felt like pre-Covid times.

Being in the office made me think that this could be anywhere in London, Boston, or San Francisco.

For a moment, I became part of another world. We could also call it a bubble. I have to admit, I like this bubble. I am really envious of all of the software engineers, marketing and sales people who are living and working in it every day. Employees who are working in this bubble could easily find a similar job in Western Europe, the US or anywhere in the world - not to mention the remote work possibilities.

I admire the founders, aka "bubble makers," who managed to create an environment in the heart of Budapest that not only matches the working conditions but also the salaries of their Western counterparts. These companies are competing against the best companies globally, and winning. They are able to recruit and keep top notch employees, grow their global customer base and attract the attention of international capital. Because of them, hundreds of skilled, young professionals stay in Hungary instead of leaving the country.

What makes these companies and their founders exemplary is their shared values. They are ambitious, not afraid to compete, meritocracy is a key element of their company cultures, people are empowered to have their own opinion and are judged based on their performance. Maybe all of these sound obvious, but if you think about the general sentiment in the Hungarian business world in the last decade, then these founders and their companies are the outliers.

There is an old saying, "every organization, be it a small company or a country, reflects the values of its leadership."

Today, unfortunately, there are only a handful of bubbles like this in Hungary, and I feel very lucky that I had the privilege to work with a few of them very closely. What I've witnessed from the first row in the past five years, is that it is possible to build these companies from scratch, despite all the complaints about our education system, lack of entrepreneurship, missing commercial talent, cultural differences, etc.

As an investor, one of my main goals is to find founders who are able to create more and more "bubbles" like this in Hungary. Venture Capital is an interesting profession. At the end of the day the product (money) is the same regardless of which fund wires it. However what makes the difference is what comes with it.

I firmly believe that as an investor you have to share similar values with your founders. If that's not the case, then the investment will most probably fail. As an investor, you have to live up to your core values and the local investor community has its own responsibility to pinpoint those who are not acting in line with standard business practices.

Being a local VC means that, in most cases, we're the first stop for founders in the fundraising hustle. It is our duty to provide them with a similar package (network, advise, money) to what their fellow founders are receiving in London or Berlin otherwise our future "bubbles makers" will start with a handicap from the very beginning. At Day One Capital we strive to live up to this expectation every day, and believe that if a future bubble maker meets with us, that she or he sees that our goals are aligned and our values are shared!

# How popular is bootstrapping?

**Have you raised external funding or are you planning to in the next 12 months?**

*% of all respondents, $n_{2020}=232$, $n_{2021}=212$*

| Year | we've raised & plan to again | we plan to fundraise | we don't plan to fundraise | | no answer |
|------|------|------|------|------|------|
| 2020 | 53% | 13% | 19% | 5% | 10% |
| 2021 | 62% | 14% | 17% | 5% | 3% |

Legend:
- ■ we've raised & plan to again
- ■ we've raised, but don't plan to again
- ■ we plan to fundraise
- ■ we don't plan to fundraise
- ■ no answer

*Source: Startup Hungary*

*among champions, n=27, among pretenders, n=54*

Champions pie chart: 74%, 19%, 7%, 0%, 0%

Pretenders pie chart: 72%, 7%, 15%, 4%, 2%

Legend:
- ■ we've raised & plan to again
- ■ we've raised, but don't plan to again
- ■ we plan to fundraise
- ■ we don't plan to fundraise
- ■ no answer
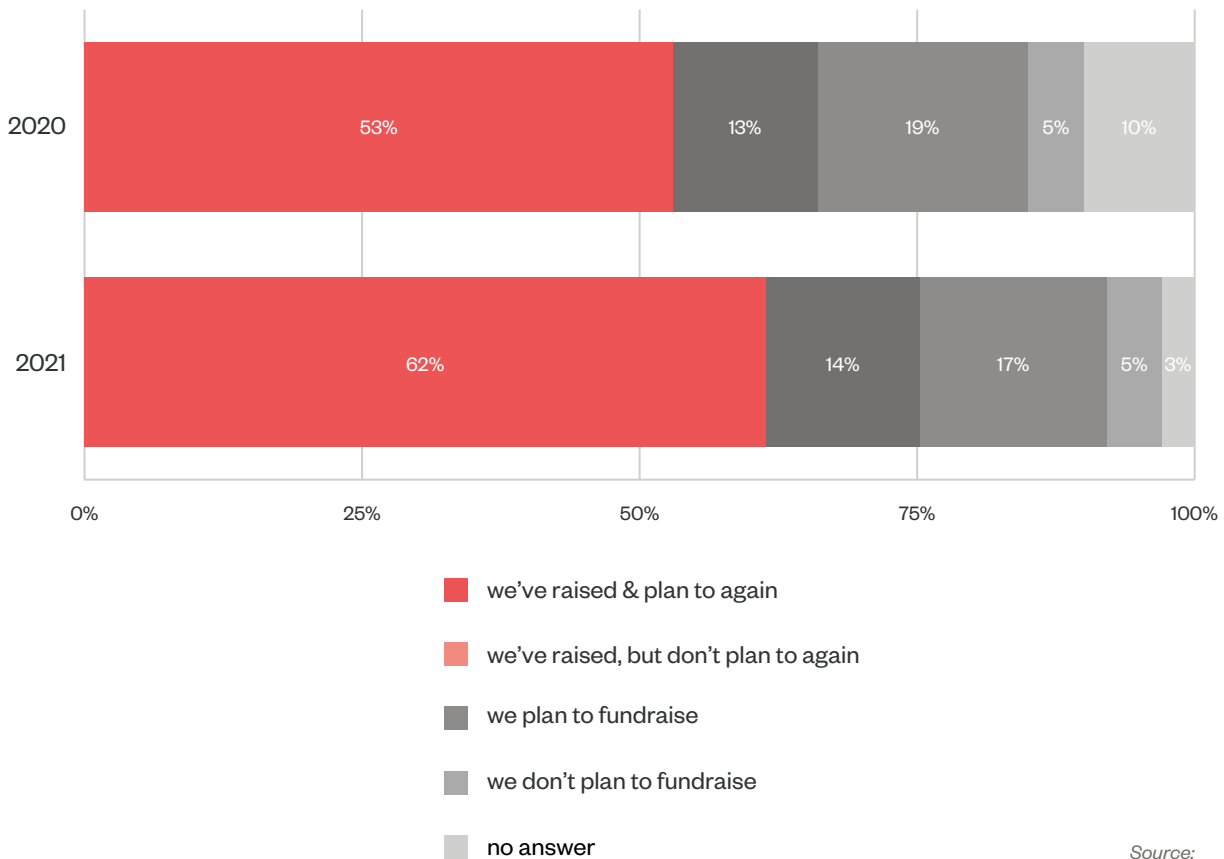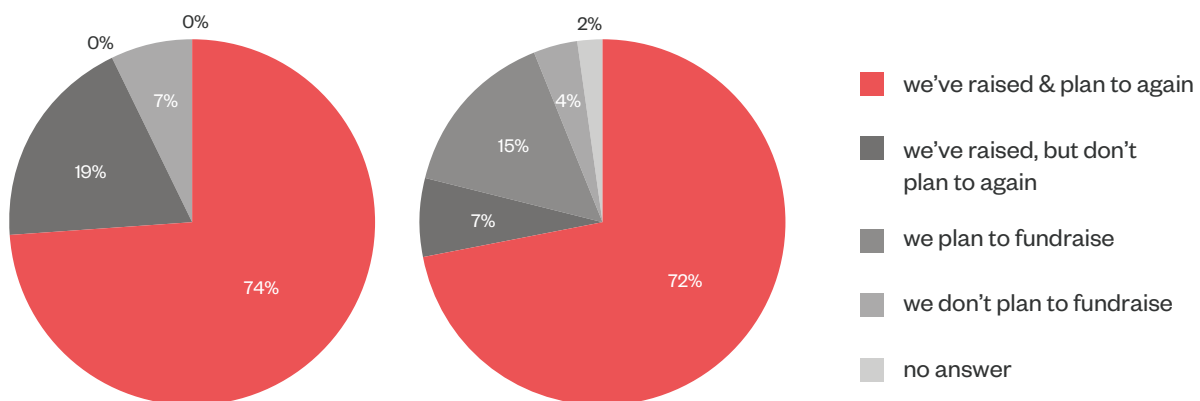
## Why didn't you raise money?
*% of bootstrappers, n=45*

| Category | % |
|---|---|
| we want to raise from top-tier investors, and we need to grow before | 22% |
| we are too early, and we want to raise money later | 20% |
| we tried but we didn't like the available opportunities / terms | 20% |
| we are bootstrapping and we don't want to raise in the foreseeable future | 18% |
| we tried but we were rejected | 9% |
| other | 9% |
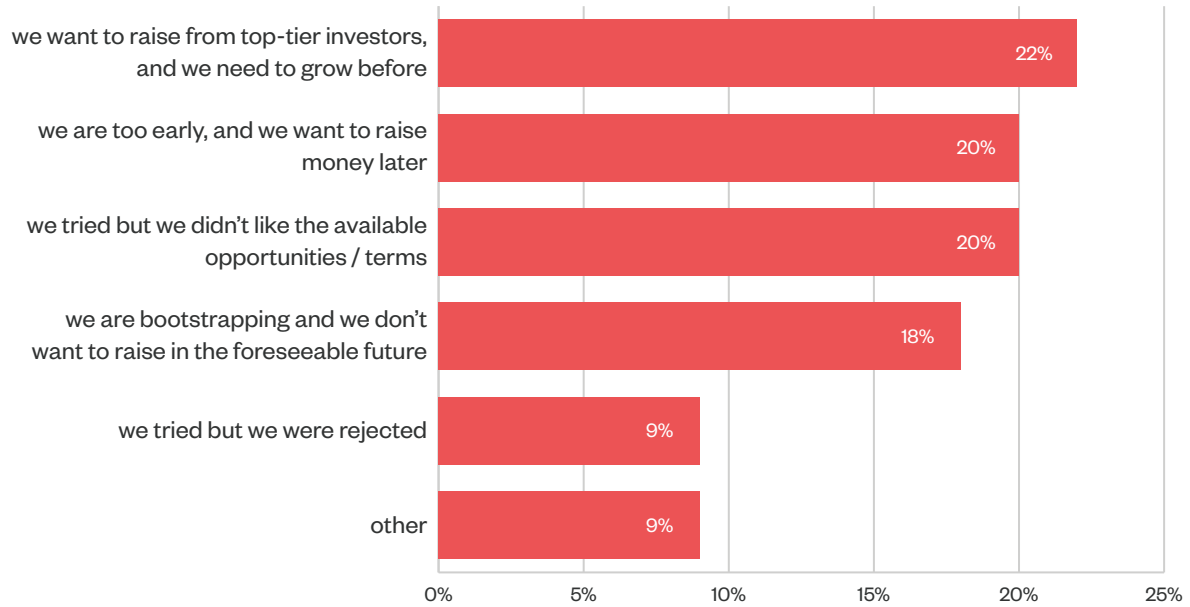
*Source:*
*Startup Hungary*

# Where do startups get money from? 1/2

**Where did you raise money from?**
*% of all respondents, $n_{2020}=232$, $n_{2021}=212$*
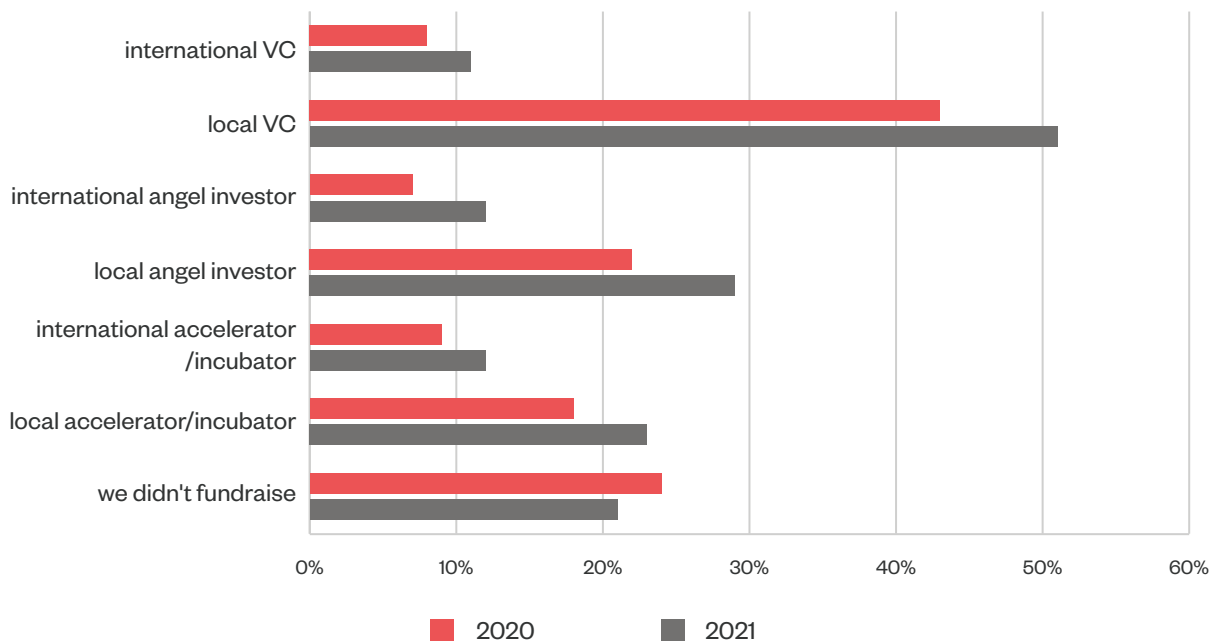
- 2020
- 2021

**Where did you raise money from?**
*among champions, n=27, among pretenders, n=54*

- champion
- pretender
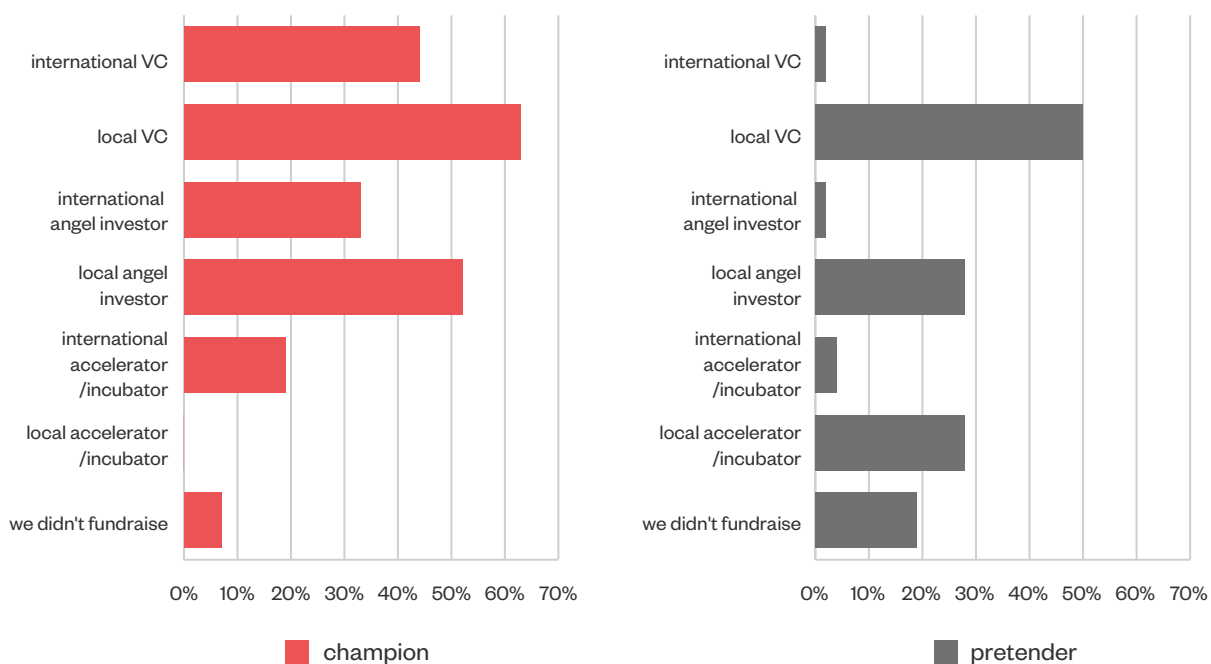
# Where do startups get money from? 2/2

## Where are you planning to fundraise in the next 12 months?
*% of all respondents, $n_{2020}=232$, $n_{2021}=212$*

Legend: 2020 | 2021

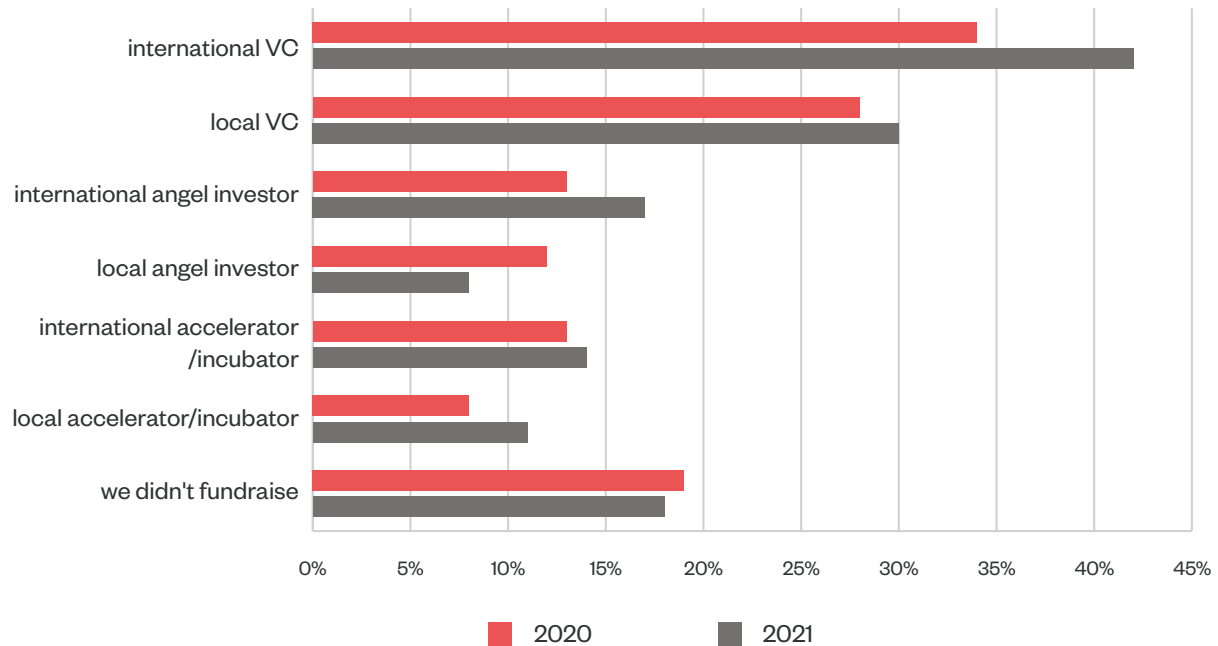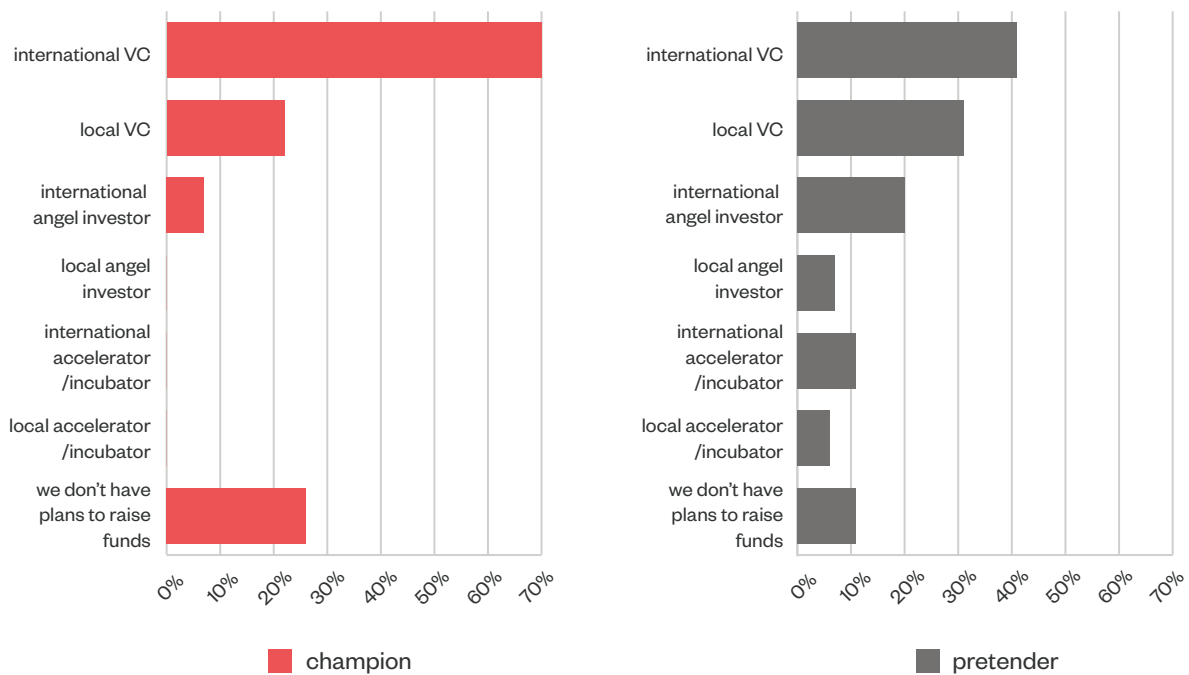## Where are you planning to raise from in the next 12 months?
*among champions, n=27, among pretenders, n=54*

Legend: champion | pretender

**Balázs Haszonics**
Partner at Lead Ventures

# Chasing the unicorns: CEE scale-ups are becoming more attractive to Western investors

Romania's UiPath made history in the region when it closed its Series C financing round with a strategic investment of €196 million from Sequoia Capital, CapitalIG and IVP in 2018, becoming a unicorn before entering the stock market in 2021. Their success can also be traced back to regional investors who supported the team at early stages of their journey.

The startup builds AI-based services for enterprises in the area of robotic process automation (RPA) and has become one of the fastest growing enterprise software companies in history. This is just one of the region's recent success stories, showcasing that CEE has massive potential and successful startups founded here are attracting global attention.

Besides UiPath, a growing number of additional unicorns have emerged from the region's technology companies since 2015, including the already exited Hungarian LogmeIn and the Czech Rohlik, which is still privately held.

Indeed, lately, the startup and scale-up scene of Central and Eastern Europe has caught the eye of global investors and VC funds. When we take a look at the latest investment trends in the CEE markets, we can see the rapid growth of startups and scale-ups - the valuation of tech start-ups in CEE has exploded from €10 billion in 2010 to €186 billion in 2021, attracting investors from the US and Western-Europe – based on Dealroom.co's 2021 report.

CEE-founded companies have also raised record investment over the past year. Venture capital investment into the region

was set to break records with investments of €5.4 billion in 2021, after a downturn in 2019 - including companies that were founded here but relocated. VC investments in the region have gradually increased in recent years. The increase was driven by early-stage investments in terms of number of deals and more mature scale-ups in terms of deal volume. While startups are typically funded by investors from the region, a number of Western European and US investors have become involved in financing scale-ups and mature technology companies.

*Based on the latest reports we may find that later stage investments in the region are overwhelmingly dominated by US investors with a share of over 50% by volume, followed by investors from Western Europe with a share of around 20%.*

Share of local CEE investors has fallen from 25% in 2015 to below 10% in 2021, mainly as a result of some "extra-large" transactions typically financed by US investors.

International VC attention concentrated on a few markets in CEE, startups founded in Estonia, Romania, Poland and Lithuania have all raised over €1B in VC funding since 2015. The Baltics is a true hotspot, with Estonia leading the region by far in VC investment per capita in recent years – there is more than 1 startup per 1,000 people in the country. In other

regional countries with less developed VC ecosystems (e.g. Romania) we see a trend for leading scale-ups to relocate to more developed markets where they can raise financing more easily. Startups founded in Hungary have raised above €400 million in VC funding since 2015.

*In terms of sectors the most attractive one was information and communication technology (ICT) with 44% of total value.*

The second largest was biotech and healthcare with 14% of the total CEE investment value, while business products and services and consumer goods and services ranked third and fourth with 12% and 10% of the regional total invested in each sector, respectively.

Among international investors active in the CEE region, we see some "returning customers", those who have made several big ticket investments in the region over the past few years. In particular, there has been strong interest in regional technology companies from Sweden's Creandum, Finland's Inventure and France's Partech. US investors like Accel, Bessemer Venture Partners, Tiger Global and Index Ventures have also stepped in to finance CEE based scale-ups.

Within the CEE region, domestic investors with a specific focus on scale-ups, such as Hungary's Lead Ventures and Poland's OTB Ventures, are also playing an important role to help these fast growing companies on their journey. Our mission at Lead Ventures is to support the most promising scale-ups of the region and to serve as a bridge towards international success. We strongly believe that there is still a lot to do to connect the CEE region to the global VC ecosystem. To that end last year we became the first Hungarian partner of Plug&Play Tech Center, a Silicon Valley based innovation hub and a perfect platform to promote our portfolio companies globally.

# Do government backed funds, private VC and international players invest in the same startups?

**Where did you raise money from?**

*% of all respondents, total n=212*



| | | | |
|---|---|---|---|
| total | 63% | 5% | 27% 5% |
| champion | 44% | 12% | 44% |
| pretender | 84% | 2% 7% | 7% |
| startups with state funds | 78% | | 22% |

■ locally ■ internationally ■ locally and internationally ■ other sources only
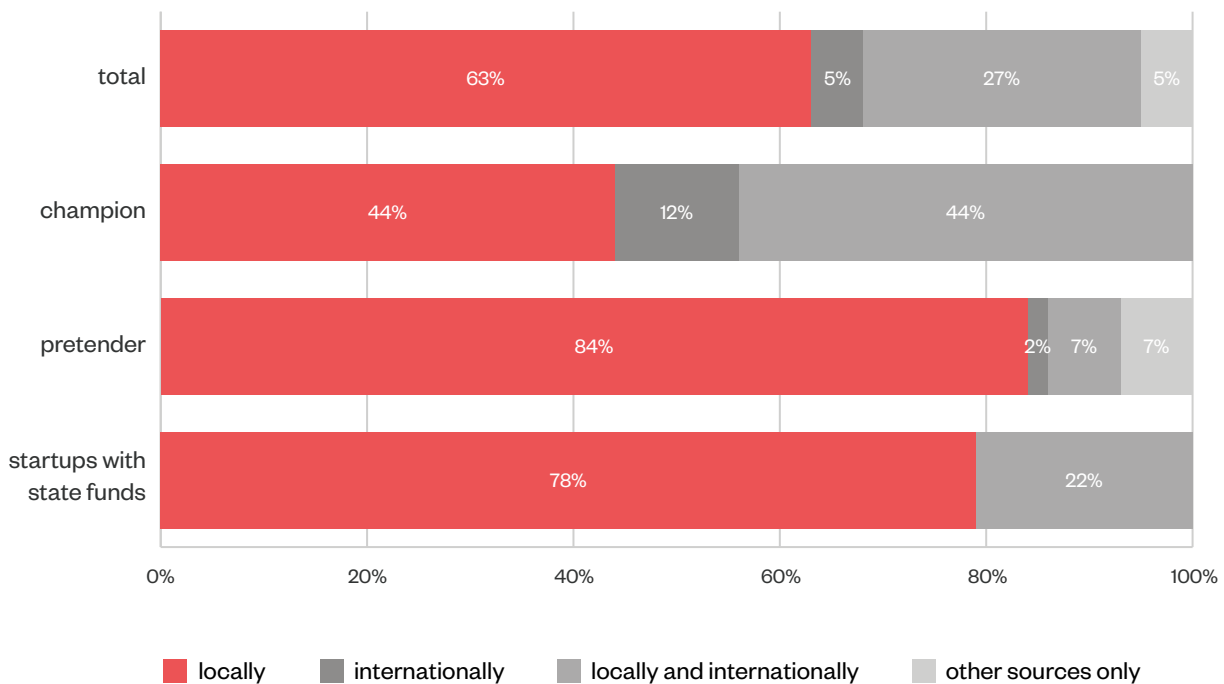
*Source:
Startup Hungary*

**Which local VCs did you raise money from?**

*% of startups raising money from local VCs, total n=98, champion n=17, pretender n=27*



| | state funds | private funds | private & state funds | no answer |
|---|---|---|---|---|
| total | 70% | 15% | 11% | 5% |
| champion | 41% | 29% | 24% | 6% |
| pretender | 85% | 4% | 4% | 7% |

■ total ■ champion ■ pretender
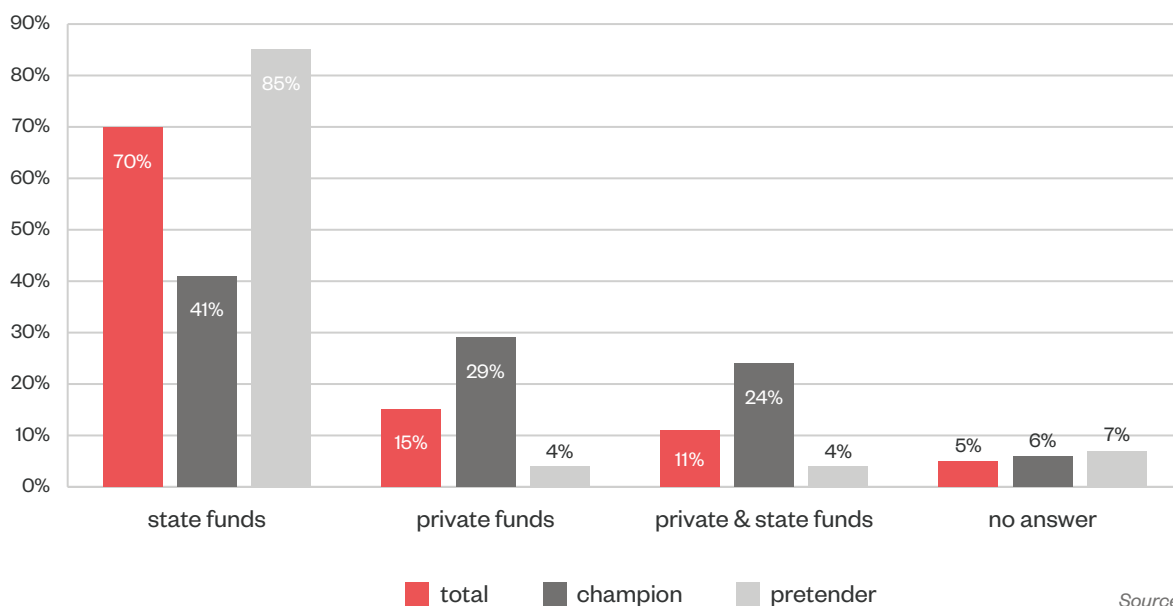
*Source:
Startup Hungary*

# Number of funding rounds

## How many funding rounds have you raised so far?
*% of startups w/ external funding, total n=161, champion n=25, pretender n=43*

Legend: total, champion, pretender
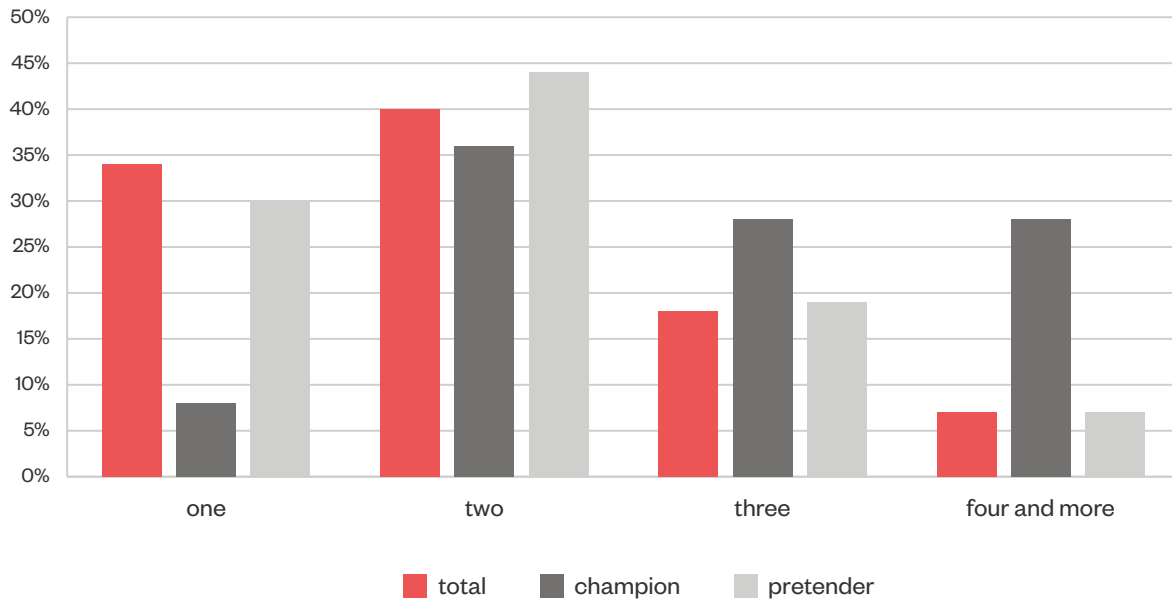
## Number of rounds by total funding amount
*% of startups w/ external funding, n=161*

Legend: <100K EUR, 100K-250K EUR, 250K-2M EUR, 2-10M EUR, >10M EUR
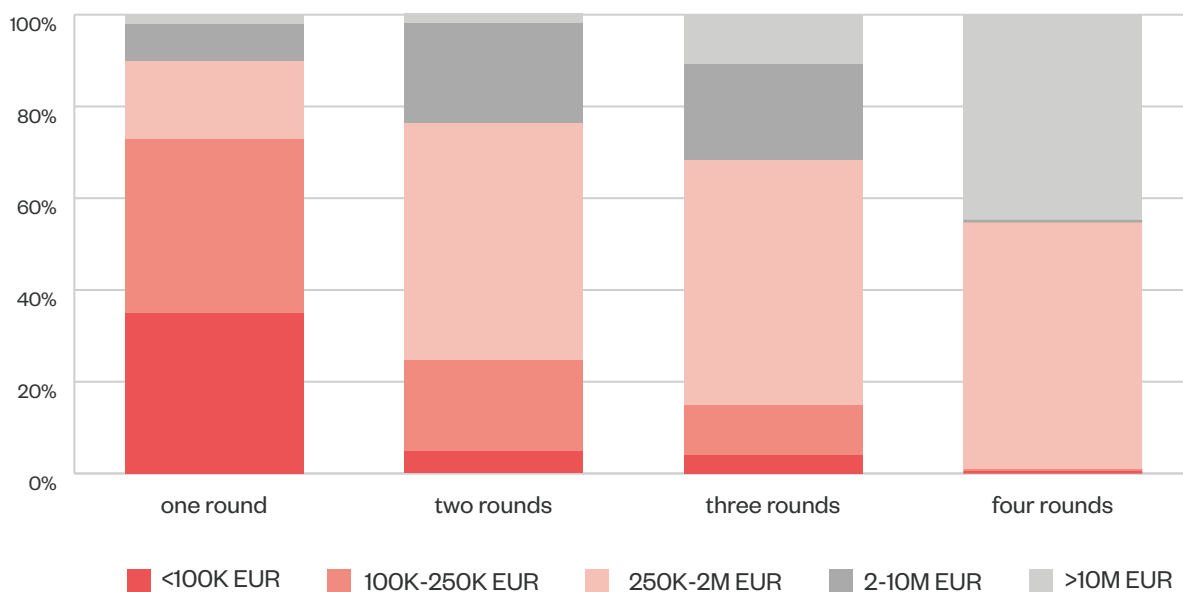
# Investment stages

**What stage was the most recent round of investment you raised?**

*% of startups w/ external funding, total n=161, champion n=25, pretender n=43*



Legend:
- pre-seed
- seed
- pre-series A / seed +
- series A
- series B
- series C or higher

*Source: Startup Hungary*

**Aurél Pásztor**

*Partner at PortfoLion Capital Partners*

# A startup rollercoaster ride

As I was driving to the office this morning, I passed by the rusty rollercoaster that is now the only remnant of Budapest's former Vidámpark (amusement park). Every time I look at its wooden structure, I remember the face of the conductor I saw as a kid when I first took a ride. I was quite scared, but the guy - who at the time was driving the carts by hand with what looked like a joystick - was sitting in the middle cart, hunched, with a stoic face of stone, even when we were speeding down in what felt like a freefall. I could not comprehend how someone could be so indifferent to what was going on around him - people screaming at the top of their lungs.

Today, we are in the seventh day of the war of Russia against Ukraine and this evening the easing of Covid restrictions were announced in Hungary, basically lifted altogether. For two years we were getting in and out of pandemic waves and now when it feels like it's finally over, some think WW3 is about to start. I am wondering if we are in a rollercoaster or in a minecart running only downhill into the abyss.
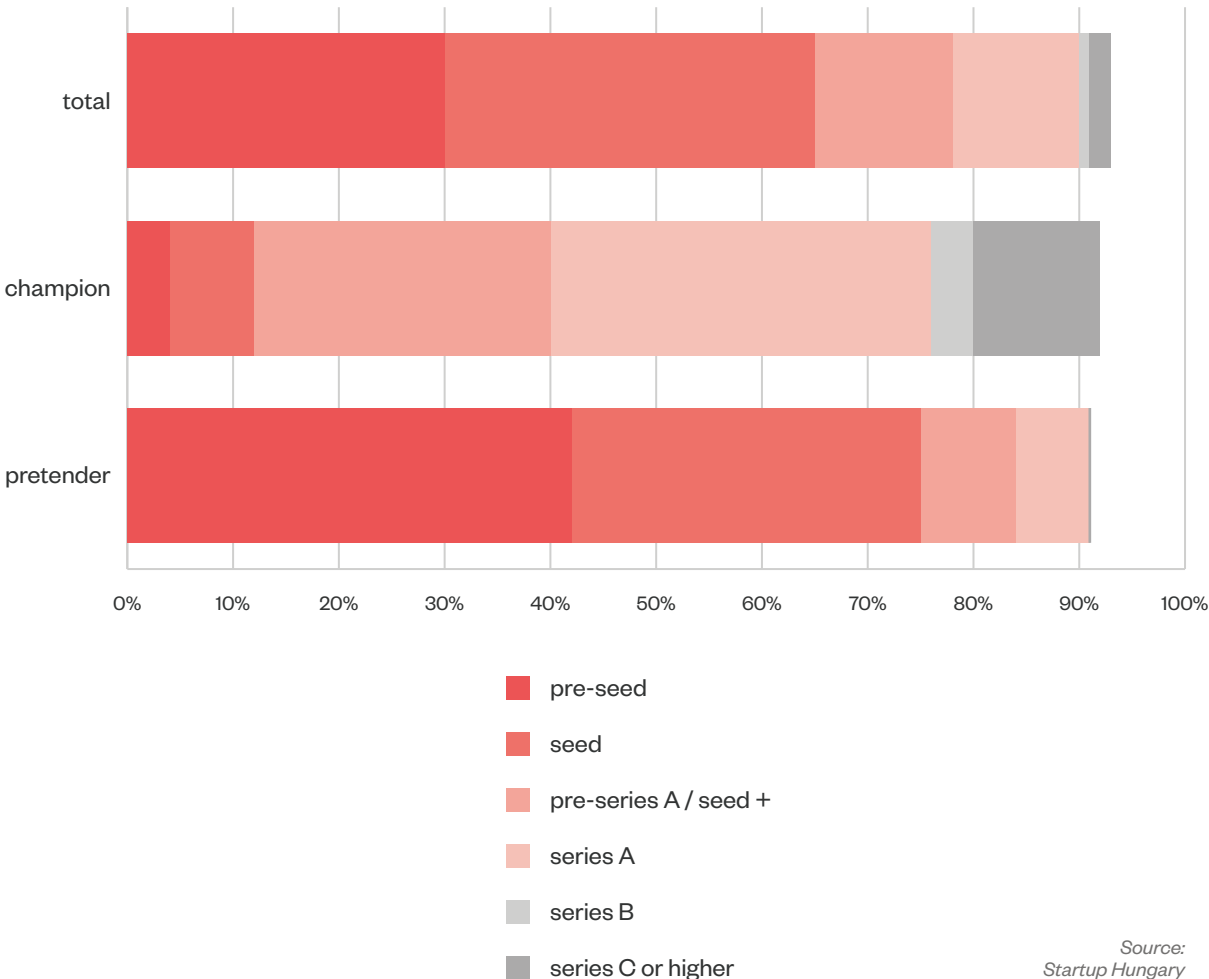
I tell myself that we are riding a rollercoaster.

*In the last two years we had many spectacular ups — and also downs — only the amplitude was getting higher. Looking back at what happened with startups and VC funds in Central Eastern Europe during this time, we certainly had unprecedented achievements.*

When the pandemic started, no one knew how it would affect tech startups, even the largest European fund of funds, panicked. But what happened is that startups and

VCs emerged as a winner among asset classes. People who were staring at screens before, would stare now even more. Guys who used to do their shopping for dinner are ordering delivery, and staying home waiting for their groceries or dinner to arrive. Non-gamers, including the elderly, started playing on mobile, the new category play-to-earn emerged, and entire villages realized that playing Axie Infinity is the best thing they can do to earn a living when everything shuts down because of the virus. Teachers moved to teach remotely, and the tutoring industry moved online.

Luckily, we also managed to benefit from this unprecedented adoption of digital tools. Our online English tutoring platform Novakid, has raised a Series B in less than a year, quadrupling its valuation in 2021.

*The outstanding performance of fast moving digital companies have increased the appetite of investors. A new phenomenon, the crossover fund, has appeared.*

Hedge fund managers at Tiger Global and Coatue who were already used to moving capital on a much larger scale and faster pace than VCs quickly moved into venture capital. In the summer we were reading twitter threads on how these crossover funds approach founders who are not even fundraising and give Series B term sheets on the second call with mega tickets at valuations they can't refuse.

And while we read these reports from founders in disbelief, thinking that this craziness must only be happening in the US, we soon experienced it first-hand with our online fraud prevention company SEON. They had an exceptional year signing up some of the biggest names in the fintech industry

as customers, and as they are on the way to reach escape velocity, one of the well known crossover funds gave them a term sheet in just such a rumored fashion. They, however decided on a more trusted brand, closing their Series B at the time of this writing.

This ever more aggressive behavior from the investors in the Series B stage, had a clear trickle down effect. Ticket sizes grew at all stages.

*Very simply, €5-7 million what used to be Series A is now only a Seed, and a €1-2M fundraise is considered an angel round in Europe.*

Many of the VCs in CEE, and also in Hungary, were a bit skeptical as well as somewhat unwilling to play this game - simply because of their smaller fund size.

*The regional players moved to focus on the earlier stages, catching teams when their valuation was still below the €10M mark. In practice, this meant investing based on a thesis built on a strong global trend and a good-looking team (founders with experience, vision and domain knowledge) but without market validation, let alone product-market fit.*

And even if investors became less demanding, they needed to take new types of risks to mitigate competition. As technical talent is believed to be distributed equally around the globe, often this meant investing in new territories, where the startup ecosystem was less developed and their Western peers were too afraid (or lazy) to move in.

Some attractive examples popped up. Last year Belarus-founded PandaDoc became the country's first unicorn. Vochi, the 40 person Belorussian video editing app developer was acquired by Pinterest less than 2 years after its founding, at a valuation believed to be much above acquihire rate, making their angel investors very happy.

Ukraine also became a very attractive scene with the worldwide success stories of GitLab, Grammarly, Petcube, Preply, Grammarly, and Ring.

The regionally active Hungarian VCs were no exceptions in trying their luck in the Russian influenced parts of Eastern Europe. Even when only parts of our teams are from the countries involved in the war, the conflict's effects are reaching far beyond the borders, as we know it from colleagues in Poland, Romania, and Lithuania.

As I contemplate what the near future will bring, I think about the old rollercoaster in Vidámpark. How would I feel if the stone faced conductor took me for a ride? Without seeing any maintenance for several years, would it collapse under me or would it just be the most spectacular ride ever, the envy of the Dark Tourists of the world?

# Total equity funding volume

**What is the total amount of funding you've raised in EUR to date?**
*% of startups w/ external funding, n=161*
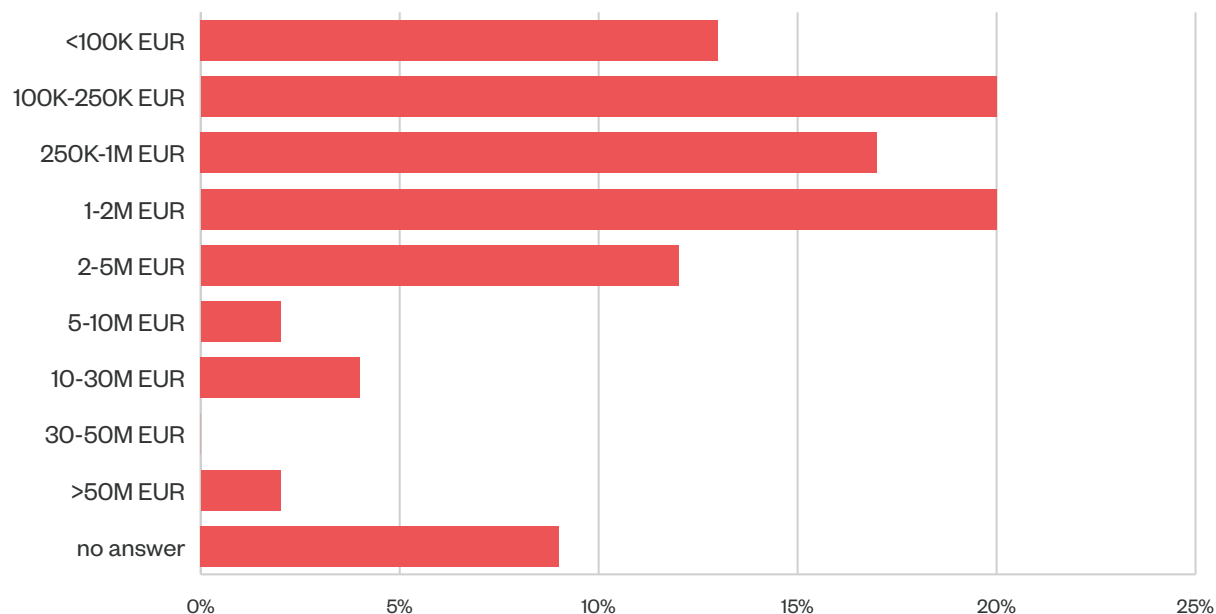
*among champions, n=25, among pretenders, n=43*

champion

pretender
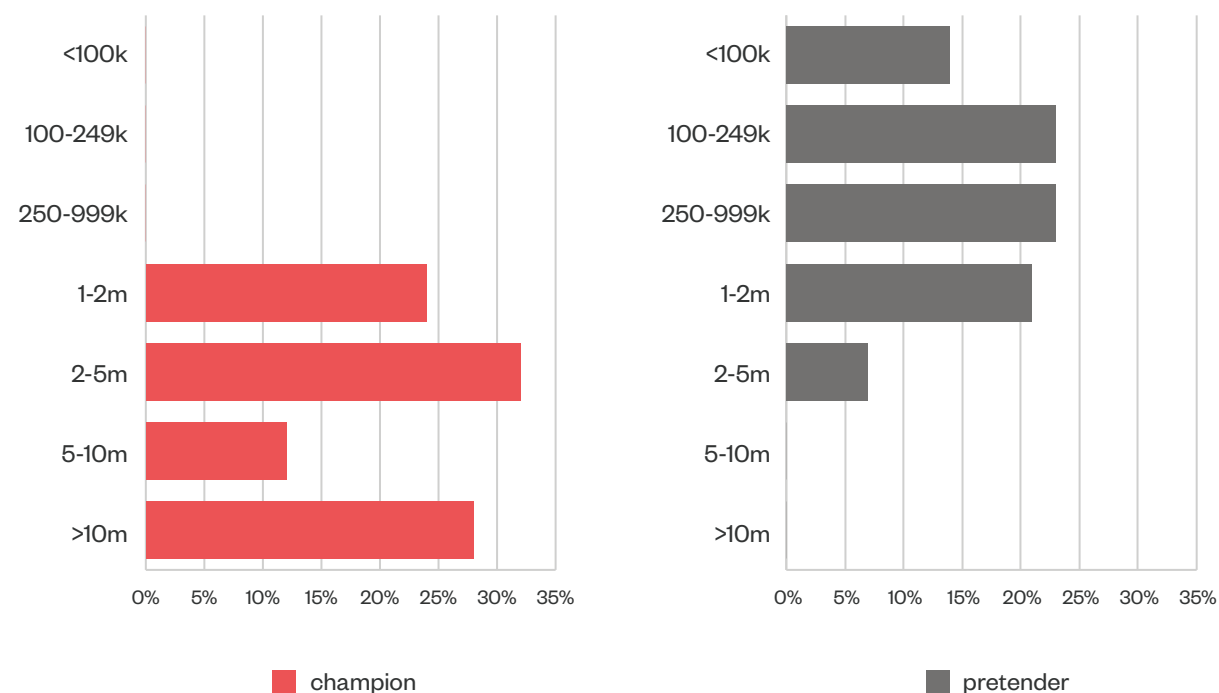
# Equity ownership among the founders

**What percentage of company shares are in the hands of founders and employees?**

*% of all respondents, n=212*

| Category | Value |
|----------|-------|
| 100% | 20% |
| 75-99% | 26% |
| 51-74% | 30% |
| 25-50% | 6% |
| 15-24% | 1% |
| less than 15% | 3% |
| no answer | 14% |
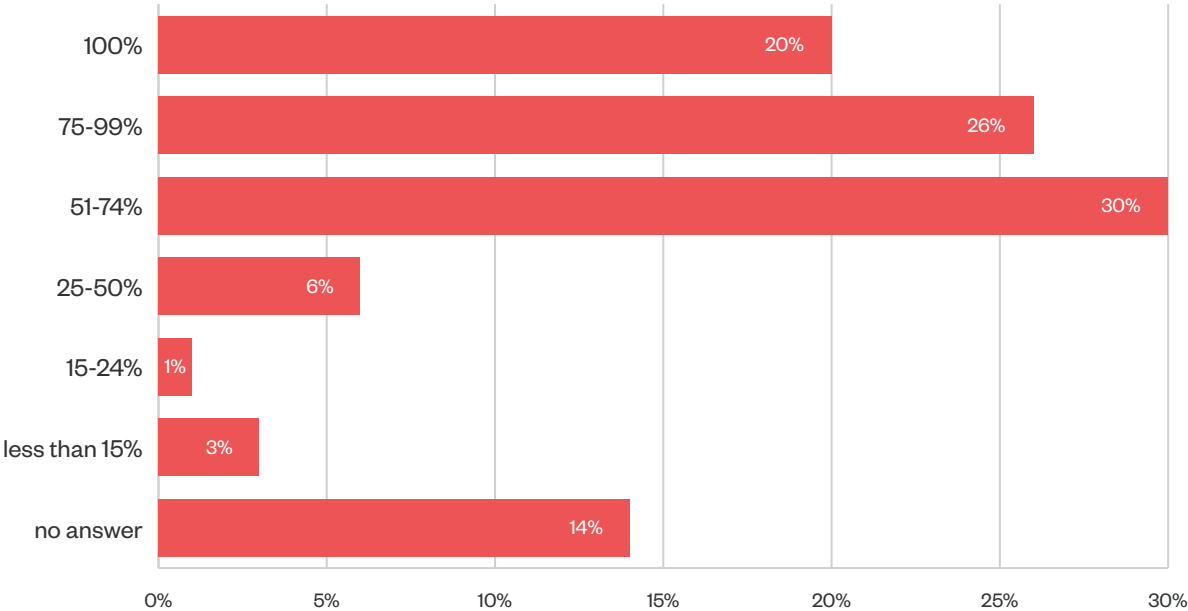
*Source:*
*Startup Hungary*

## Equity ownership by funding volume

*% of all respondents / funding volume, <100k = 21, 100-250k = 33, 250k-1m = 27, 1-2m = 33, 2-5m = 19, 5-10m = 4, 10-30m = 6, >30m = 4*



Legend: ■ >75% ownership  ■ 51-74% ownership  ■ <50% ownership  ■ no answer
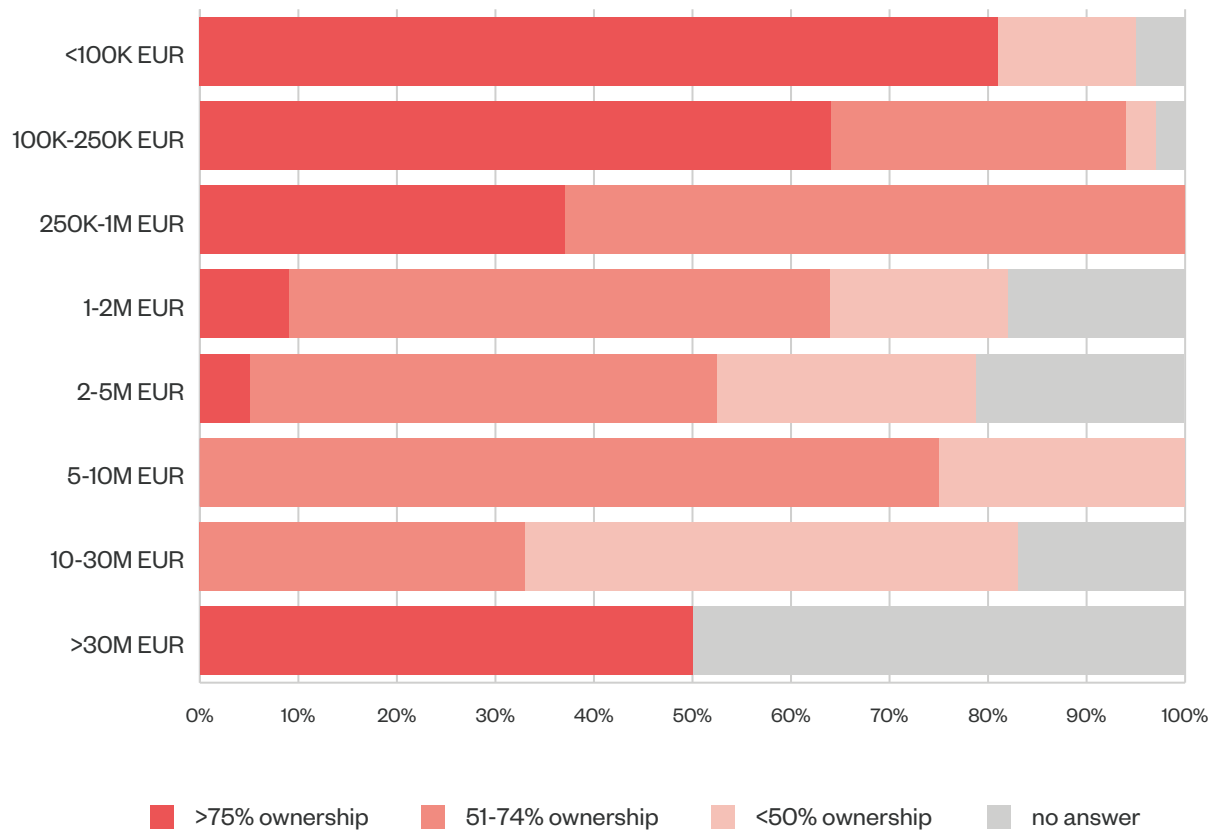
*Source:*
*Startup Hungary*

# How VC meetings converted to term sheets

**How many investors did you meet last year? How many converted to a term sheet?**

*% of all respondents, total n=212, agreement/term sheet n=80, no deal n=125*



Legend: 0-1 | 2-5 | 6-10 | >10 | no answer
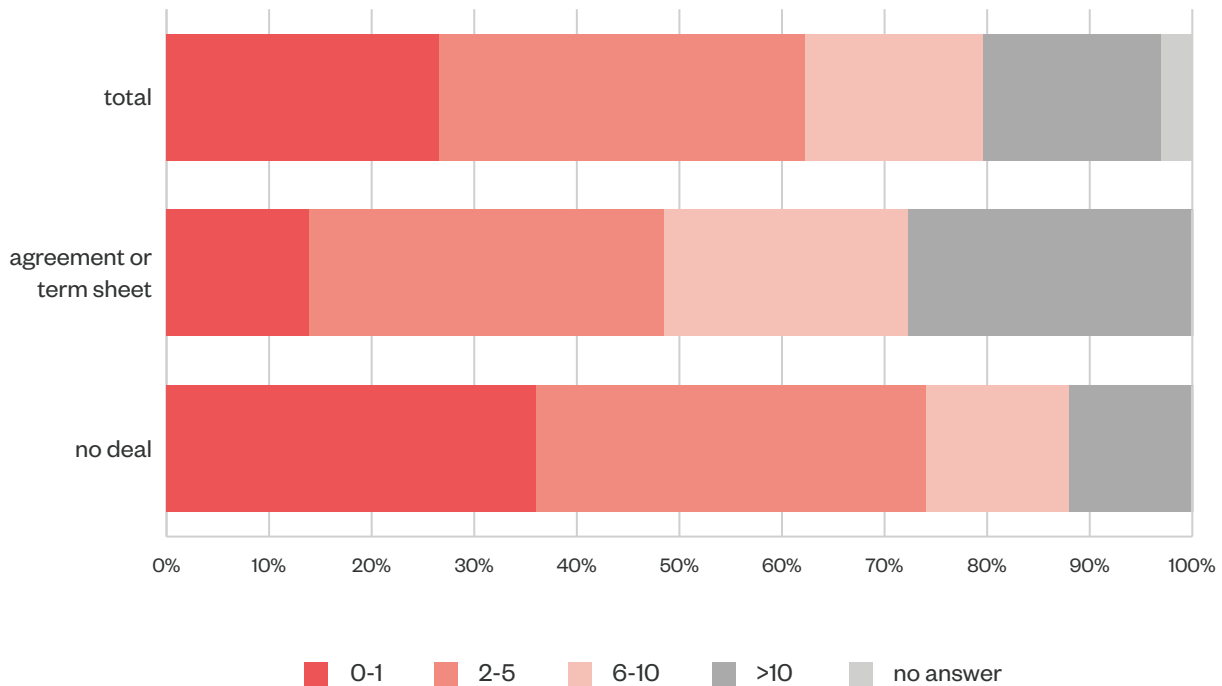
*Source:
Startup Hungary*

**Did any of your meetings result in an investment agreement or term sheet?**

*% of startups with at least 1 investor meeting, n=180*



- 44% agreement or term sheet
- 52% no deal
- 4% no answer
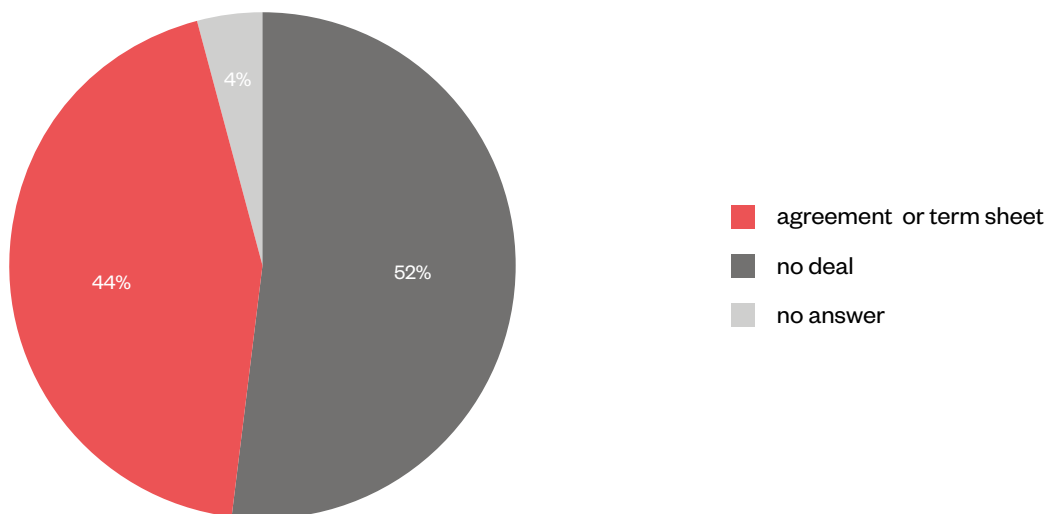
*Source:
Startup Hungary*

# How do startups choose their investors?

## What are the top factors you take into account when choosing an investor?

*% of all respondents, $n_{2020}=232$, $n_{2021}=212$*
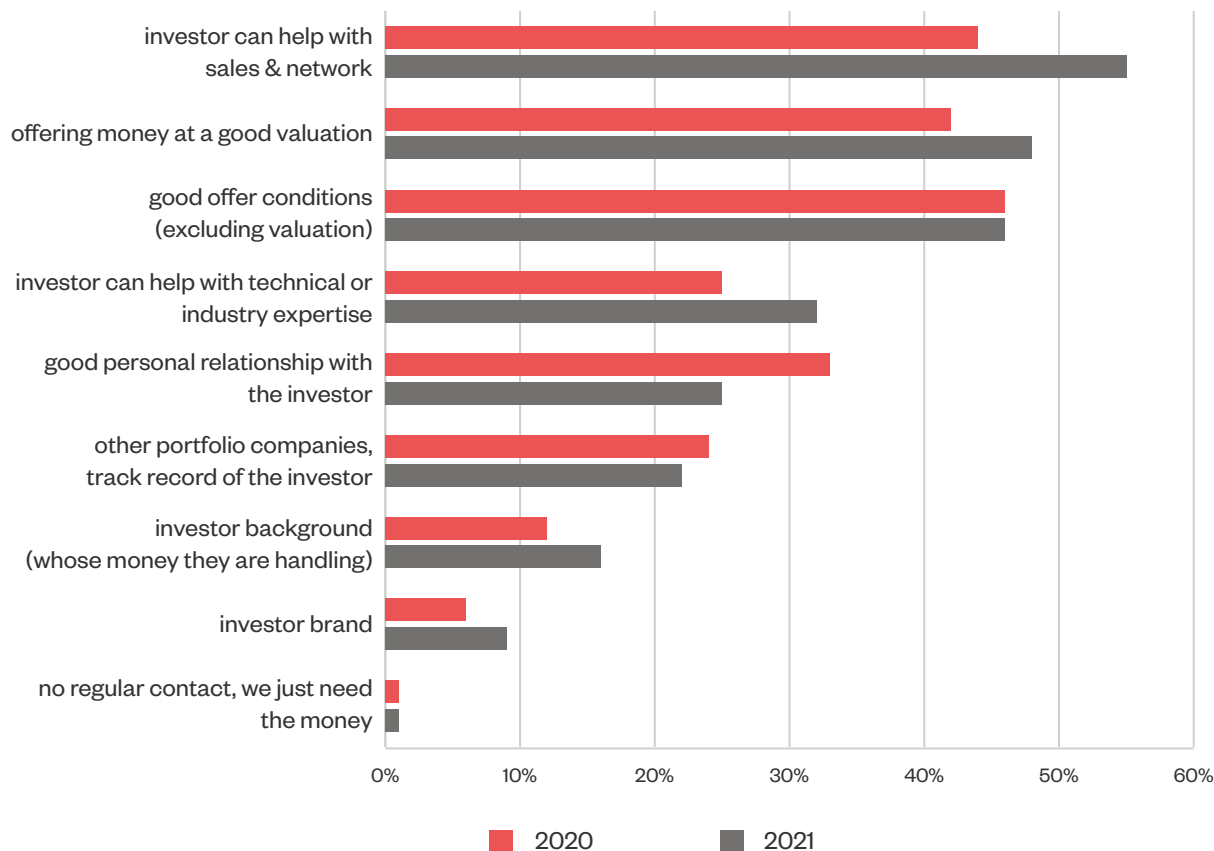
Legend: 2020, 2021

Factors:
- investor can help with sales & network
- offering money at a good valuation
- good offer conditions (excluding valuation)
- investor can help with technical or industry expertise
- good personal relationship with the investor
- other portfolio companies, track record of the investor
- investor background (whose money they are handling)
- investor brand
- no regular contact, we just need the money

*among champions, n=27, among pretenders, n=54*

Legend: champion, pretender
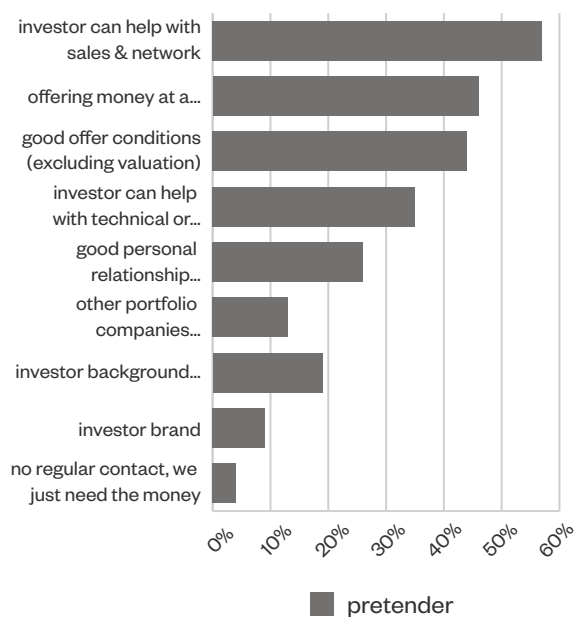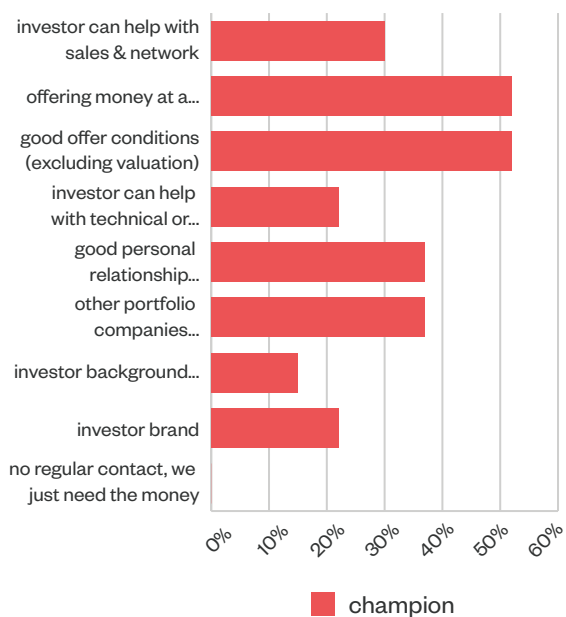
# International Expansion

# Hungarians in the international market

**What percentage of your sales comes from abroad?**

*% of all respondents, total n=212, champion n=27, pretender n=54*



Legend:
- No export
- 1-24%
- 25-49%
- 50-74%
- 75-100%
- No answer

*Source:
Startup Hungary*
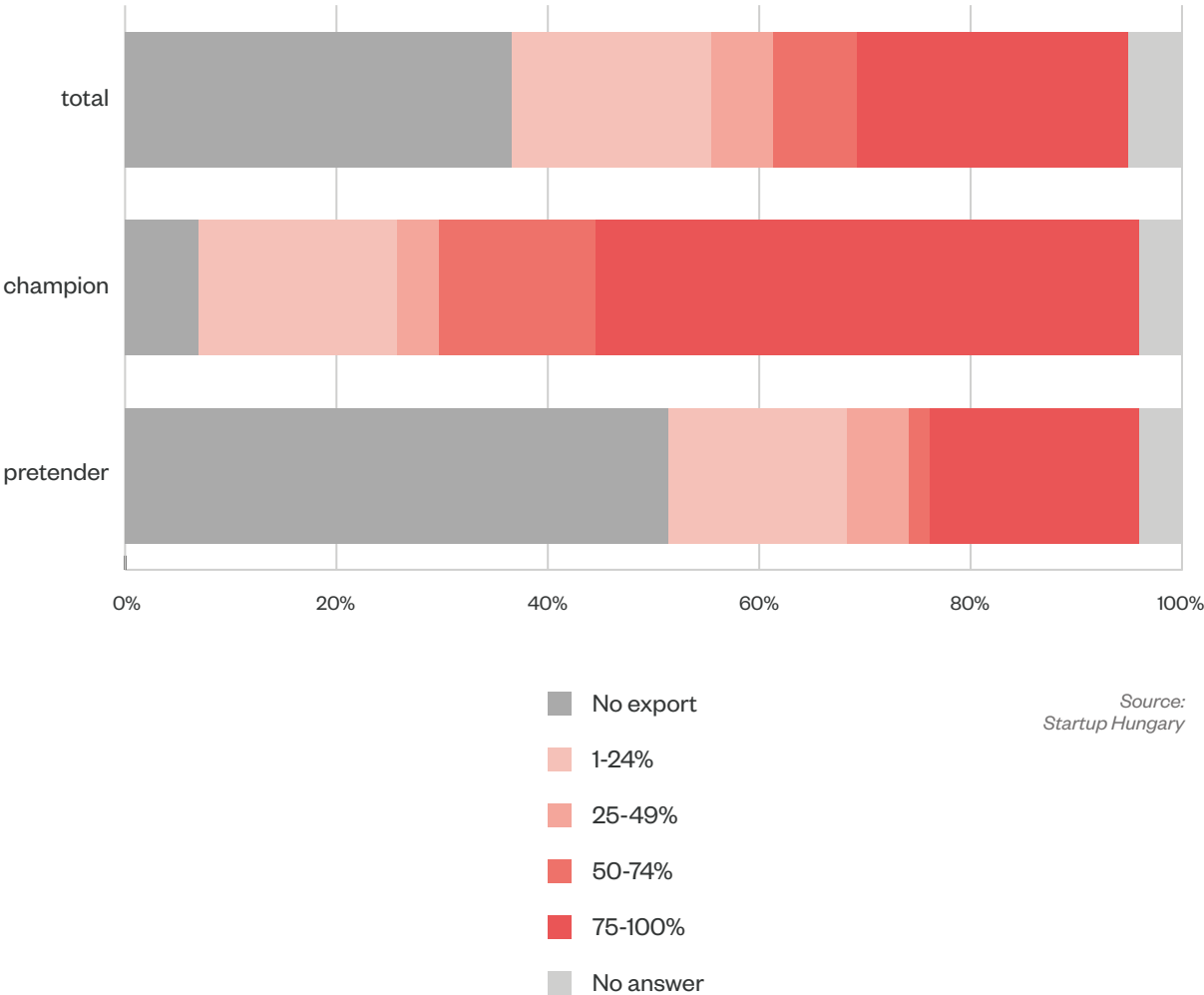
**Barnabás Birmacher**
CEO & Co-Founder
at Bitrise

# How to think globally from day one

If you ever want to go global with your startup,

*thinking about global challenges from day one is a must.*

No, that doesn't mean you need to pursue the entire global market from the get-go. There are benefits to being close to your customers. But as long as you're solving a global problem for those customers, your product direction will match your global ambitions from the first sale forward.

In the early days of Bitrise, we were mostly trying to solve our own problems as mobile developers. As a rule, that's generally a good place to start:

*Begin with a problem you know better than most and therefore have inherent insight into solving.*

While we were building out the MVP, we noticed we were actually solving a problem that a lot of others experienced, so we rapidly shifted our ambitions to a global scale. Our initial investors supported us, encouraging us to spend some time outside of Hungary, and to get exposure to a global audience up close, early on.

There are plenty of hurdles that startups thinking globally are going to need to overcome. Running an international business is a different game from running a local one, and as an office-based company in Budapest, we initially struggled with finding people that had the international experience we needed. At that time, there were only a handful of companies

in the country that had successfully made the journey we wanted to make.

To address this, we started by hiring from the handful of companies we knew that we could find talented people in, who would already understand the context of working for a company like Bitrise. We started hiring internationally early on, bringing that missing link to Budapest. And we hired on a combination of talent, drive, and values - so, even those with limited international experience had the ability to learn and grow rapidly into their roles.

Of that winning combination, all are essential, but the importance of values is still easily overlooked.

*Having well-defined values will influence both the business and your team's decision-making process. And making those values an essential part of the hiring process is one of the keys to making an international team successful.*

Building an international team, by definition, requires a mix of cultures that reflects the markets and the audiences you're trying to serve. A shared set of values is key to making that type of inclusive culture work. It ensures that, even if we don't look at the world in the same way, and don't have the same set of life experiences, we all care about a set of core values that unites us.

At Bitrise, we're very upfront about what our values are: we move with urgency and focus; we are direct and open-

minded; we care; we help each other be better. In other words, we look for passionate individuals who are keen to make an impact. We hire those who recognize that working closely with their team — working together towards common goals — is the key to success.

*Today, we're a remote-first company, which has opened up a tremendous pool of talent. In hindsight, I'd recommend most startups take a similar approach as early as possible.*

As I mentioned at the beginning of this article, having a product that answers your customers' questions is essential — wherever they are located. So I would be remiss not to mention that you also need to remain close to them through your various communication channels, even if they're on the other side of the world.

Listen to your customers. Talk to them. By hearing their challenges first-hand, and adopting an iterative mindset towards product development, you will ensure that you're developing the product they need.

Thinking globally from day one first requires you to identify a problem shared by people across the world that you can uniquely solve. Second, it involves listening and talking to your customers, to ensure that you're answering their needs as best you can. And third, it means attracting and recruiting the right people, who know that sharing your company values is as important as possessing talent and drive.

# Why don't startups have more foreign customers?

## Why do you do less than 50% of your sales abroad (including zero sales)?
*% of startups with 0-50% export, total n=123, champion n=7, pretender n=36*



total    champion    pretender
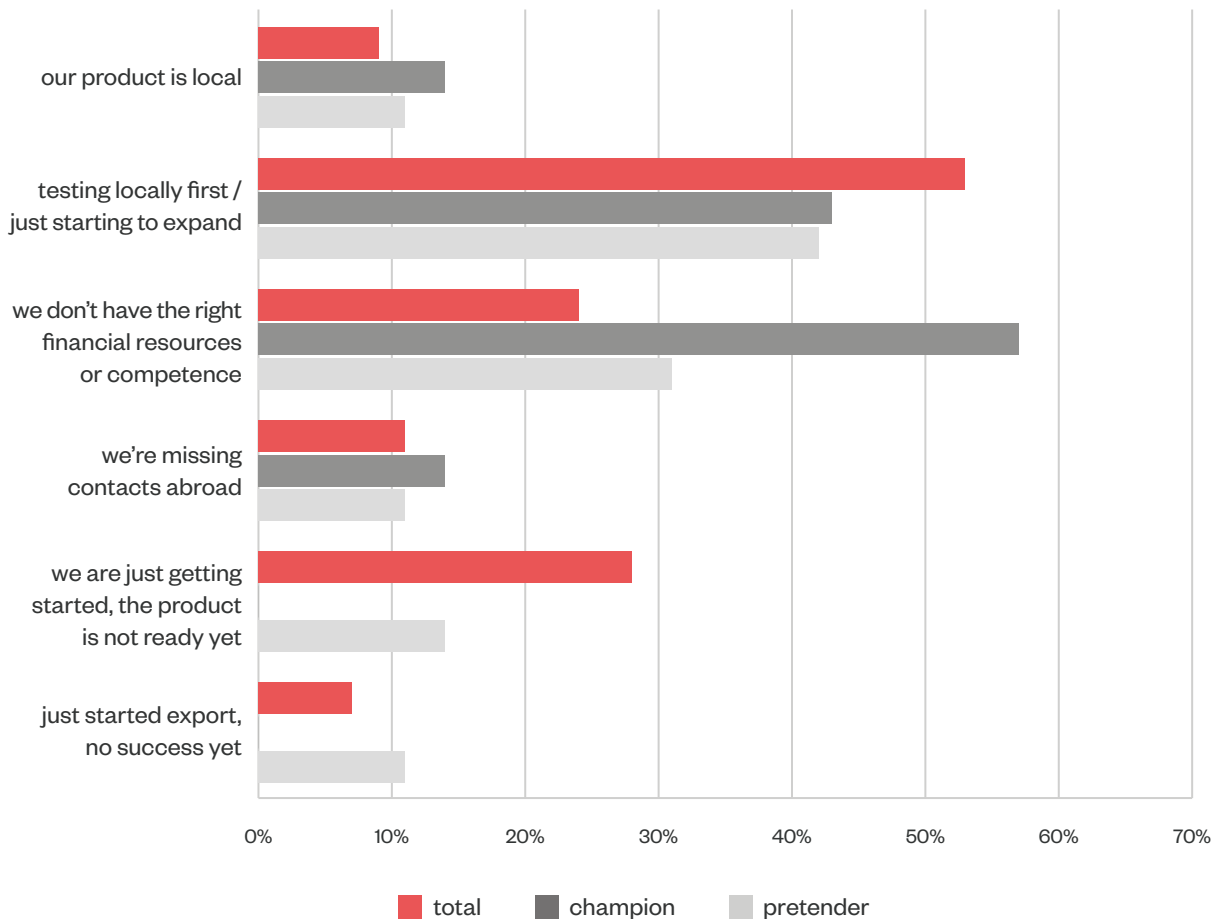
*Source:
Startup Hungary*

# How do startups plan international expansion?

## Which markets / regions are you prioritizing in the next 12 months?
*% of all respondents, total n=212, champion n=27, pretender n=54*



total    champion    pretender
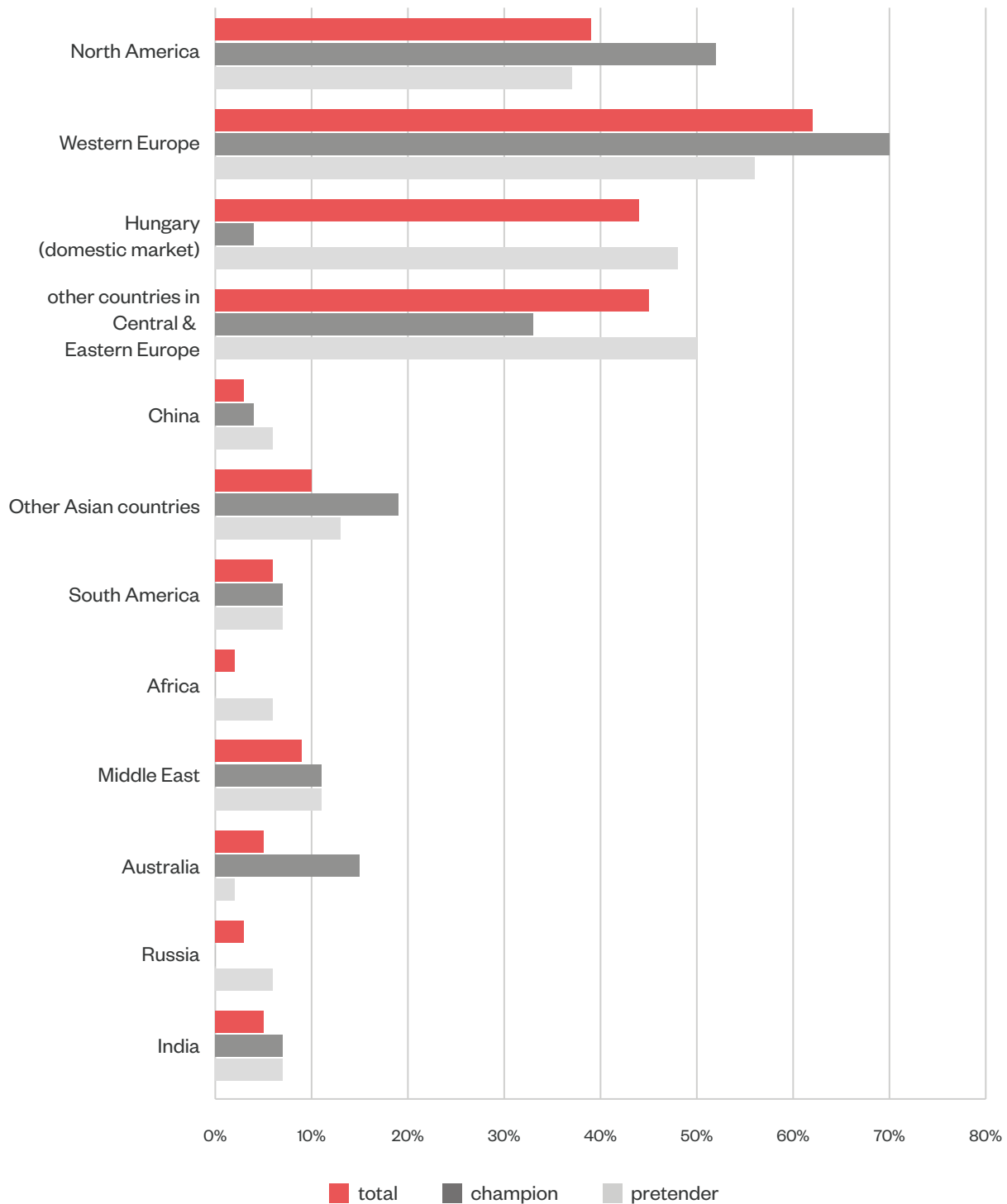
*Source:
Startup Hungary*

# Where are your foreign customers?

**In which regions do you generate revenue from international customers?**

*% of startups with export, total n= 134, champion n=25, pretender n=26*
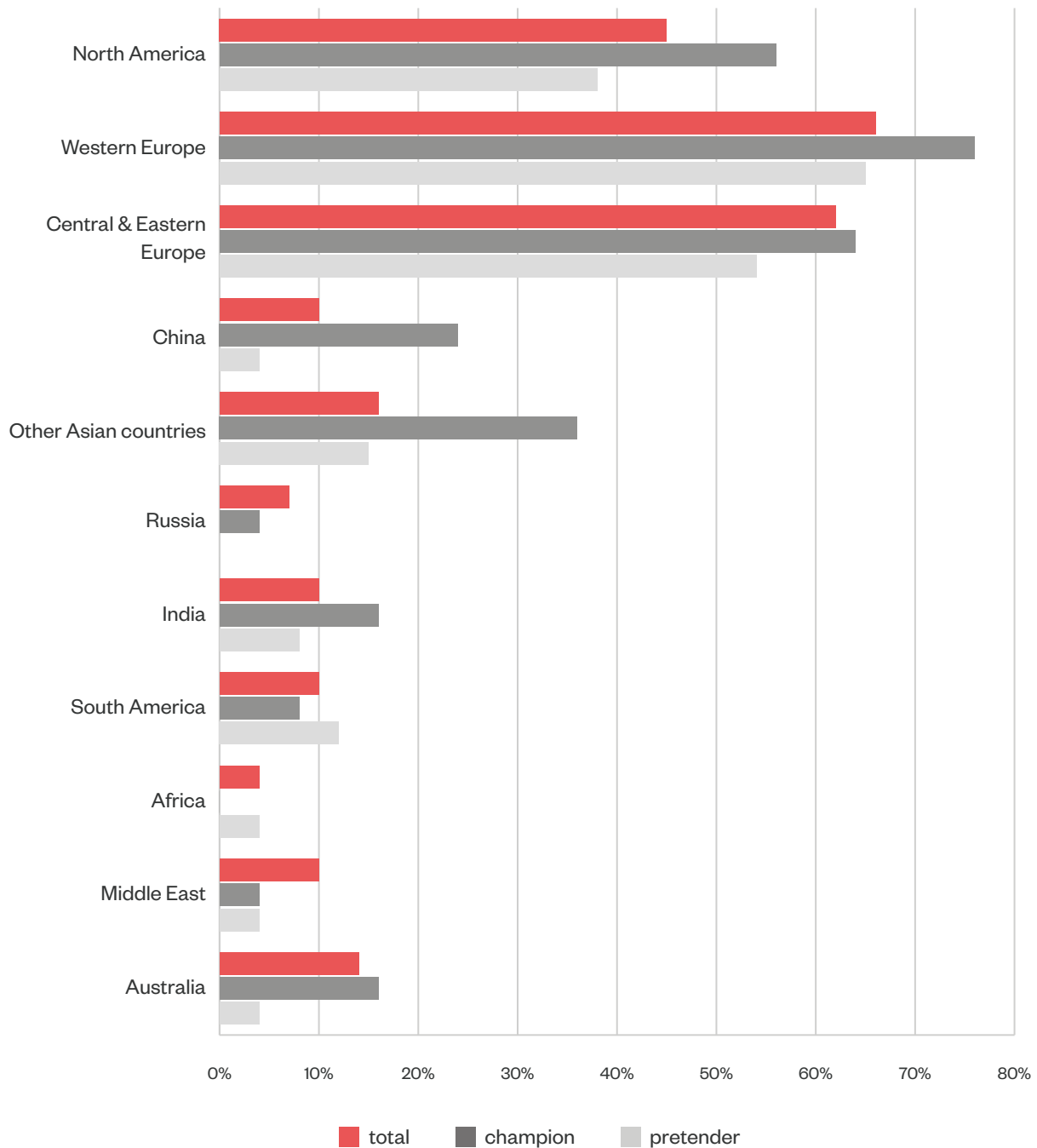


Source:
Startup Hungary

**Pál Bíró**
Country Manager at Google Hungary,
Board Member at Startup Hungary

# Going global with local support from Google

*Startups are solving the world's important challenges with agility, innovative technology, and determination. Google is proud to help. So whether they're starting out, building their startup business, or scaling up to meet the needs of consumers, businesses, and society, we connect them with the right people, products, and best practices to help them thrive and grow. Because if startups succeed, our communities and economies succeed. And Google does too.*

### Hungarian Startups broke records in 2021

2021 was a very busy year for Hungarian startups, with several interesting events, including Series A investments for Craft and SEON, The Series C round of Bitrise, or Tresorit's acquisition by the Swiss Post. The number of international VCs turning towards CEE (and consequently Hungary) has been growing in the past several years, but 2021 was a record-breaking year for the whole region in terms of investments.

### B2B is still big

Startup Hungary's first report in 2020 provided many insights. From the results, it became clear that B2B SaaS solutions are the focus of Hungarian startups, and going global is a challenge on multiple fronts, including finding the right sales and marketing talent, and understanding where is best to focus expansion efforts.

### How Google can help startups

Google has always been at the forefront of innovation, and helping startups succeed is one of its defining characteristics.

> *In 2021 we launched a local programme for SaaS B2B startups to transform their performance, while also helping teams just starting the startup journey through our Founders Academy.*

Our Google for Startups team is also very active in the region, and continuously offers several programs to those who wish to accelerate their business.

These include: the Accelerator, a program of intensive workshops and expert mentorship designed to help growth-stage startups learn technical, product and leadership best practices, several Academies that offer workshops, mentoring, and networking during which Googlers and external experts help founders develop skills on a specific topic, such as sales or growth, or the Startup School, a guided online training to equip early-stage startup founders with the tools, products, and knowledge that growing companies need.

And let's not forget about Cloud: scalability is critical for every organization that aims to build a global name. Google's cloud infrastructure helps achieve this goal. With the revamped Google for Startups Cloud program, members can get access to technical, financial and business support as well. (https://inthecloud.withgoogle.com/startup)

# Foreign subsidiaries

**Is your startup incorporated abroad or are you planning to incorporate a foreign entity in the next 12 months?**

*% of all respondents, $n_{2020}$=232, $n_{2021}$=212*

*Source: Startup Hungary*



Legend: ■ incorporated abroad ■ plans for foreign entity ■ neither foreign entity nor plans ■ no answer
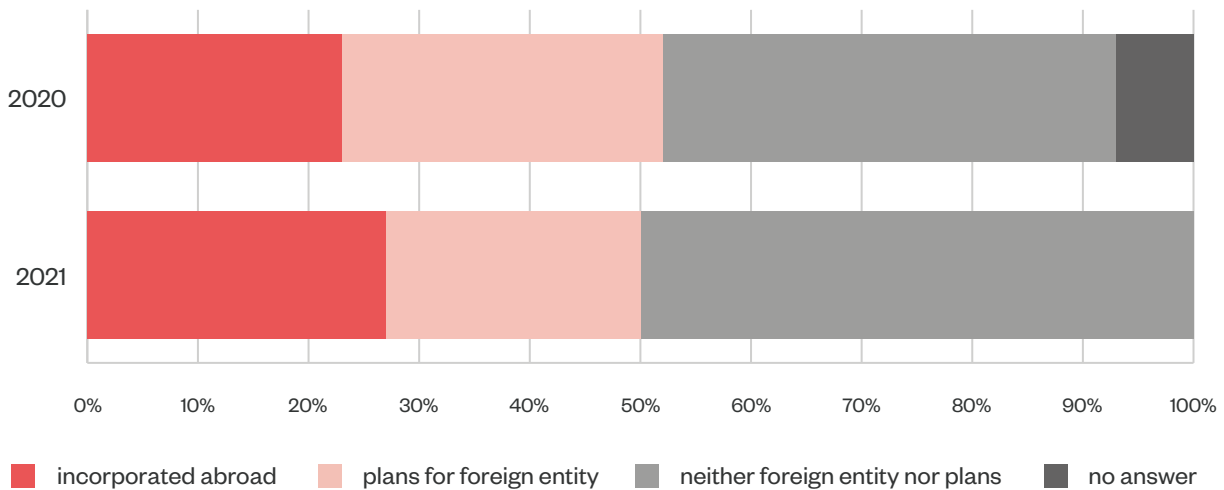
*among champions, n=27, among pretenders, n=45*

*Source: Startup Hungary*



Legend: ■ champion



Legend: ■ pretender
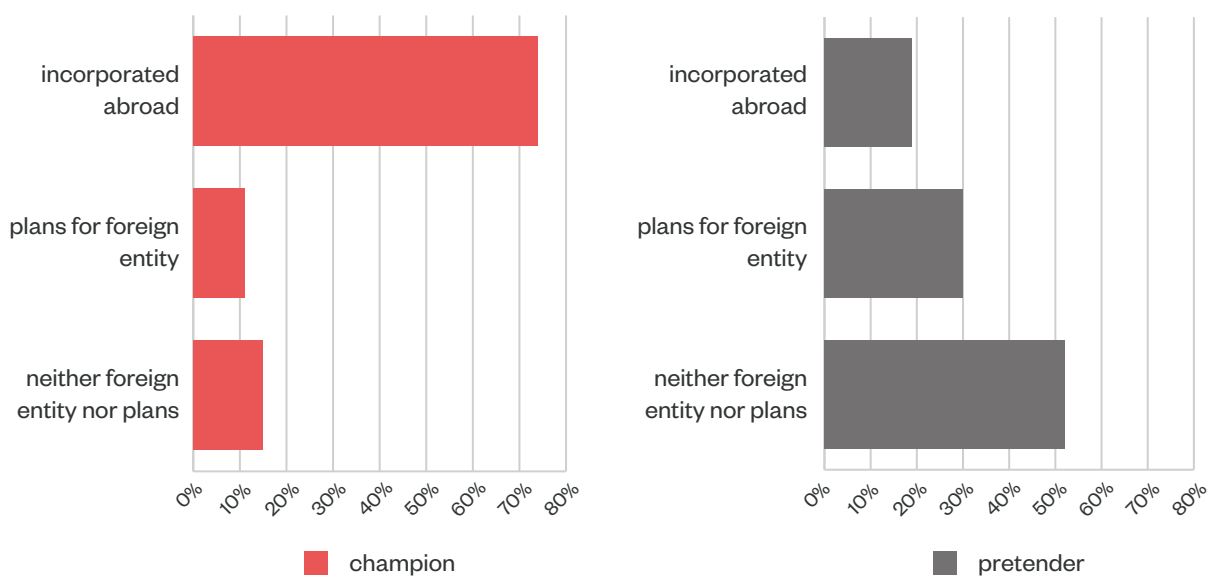
# Foreign subsidiaries

## In which country/countries?
*% of startups incorporated abroad, n=57*
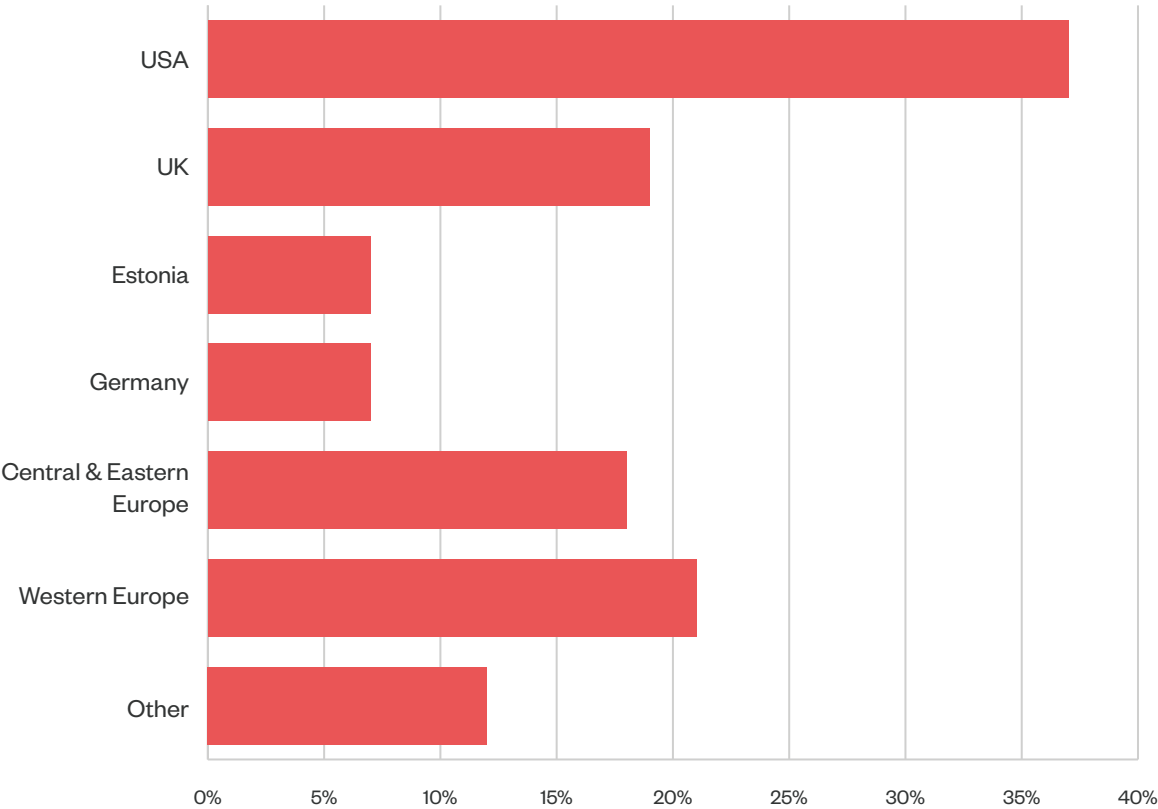


*Source:*
*Startup Hungary*

# Why do startups establish foreign entities?

## Why did you or why do you want to establish a foreign entity?
*% of startups incorporated abroad n=57, % of startups planning a foreign entity n=49*



Legend: ■ startups incorporated abroad ■ startups with plans to incorporate a foreign entity
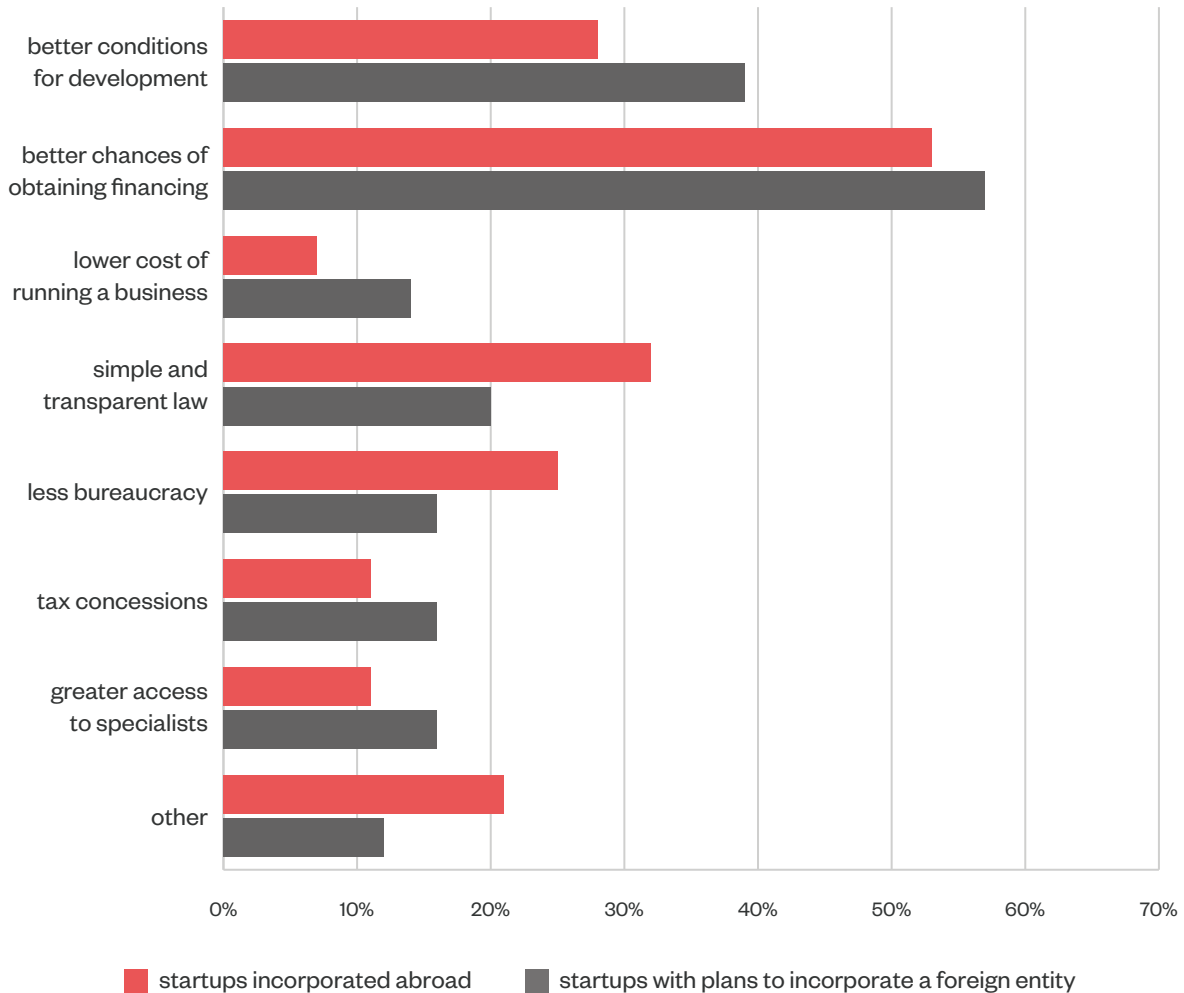
*Source:*
*Startup Hungary*

**Péter Szabó**
Commercial Partner Lead
at Microsoft Hungary

# Microsoft's tips for going global

According to Startup Hungary's 2021 report, 92% of respondents aspire to export their product or service abroad. The reality is that 37% don't have international customers, and what's more, 62% report less than half of their revenue coming from international sources.

On the one hand, this indicates that Hungarian startups understand that growth cannot be fueled by the local market, even though only a handful of cases reveals international success. This finding goes hand-in-hand with one of the key challenges of local startups: getting traction, and implementing successful sales and marketing practices.

The highly reputed Microsoft CEE Startup Awards competition saw three Hungarian startups among the top 10 this year: Cytocast, FintechX Technologies, and Volteum[1]. What they share in common is their singular solution to problems in emerging and booming markets. All three are disruptive in their respective industries and want to expand to new markets, primarily in the CEE but even beyond.

The recognition and their participation in Microsoft for Startups and Microsoft's co-sell program gives them credibility and an international network to validate their technologies and find international partners and customers. Below, I have collected five tips for enterprises aspiring to enter the international market, based on my insights as Commercial Partner Lead at Microsoft Hungary:

**Tip 1: Select your target markets wisely.**

Explore similar markets first, and then address additional unsaturated markets where you have a competitive advantage. For example, Parkl has found a niche service for smart parking and e-charging. Now they are expanding to foreign markets by building partnerships via local clients with branches in neighboring countries.

**Tip 2: Dare to learn from others.**

Learn how your peers and competitors are getting ahead. Their failures and successes reveal future obstacles and opportunities for new services.

*Understanding your rivals can help you stand out and differentiate your business.*

For instance if you are willing to sell to large Hungarian corporations, Blue Colibri (an internal communications and engagement tool) is worth keeping an eye on, as their go-to-market approach and value proposition reveal a successful way of approaching this target group.

**Tip 3: Focus on partnerships.**

Partnerships are important because they let you enter new channels and access new market segments to accelerate growth. Microsoft has always been a partner-led company: as much as 95 percent of our commercial revenue flows directly through our partner ecosystem. Our partners' growth directly fuels our own commercial cloud growth. We have thousands of co-sell-ready partners, including many Hungarian startups that generate high revenue through their successes.

---

1  https://news.microsoft.com/hu-hu/2022/03/02/magyar-dominancia-az-idei-microsoft-cee-startup-award-versenyen/

**Tip 4: Find your online distribution channel.**

As a pioneering business, you can make progress more easily by finding new and efficient sales channels.

*Online distribution channels let you lower your business overhead and operation costs, close the deal faster and shorten the sales cycle, access customers, build and maintain a strong relationship with clients, and gain data-driven insights into your market and business.*

In the Microsoft Azure Marketplace, your solutions are listed together with other Microsoft solutions connecting you to businesses, organizations, and government agencies around the world. You can even deploy your solution to a region of your preference. Local examples, Be-novative, EDUardo and Talk-a-bot can attest to the benefits of this system.

**Tip 5: Collaborate with corporations.**

Building a strategic partnership with a large company means that you get access to expertise, world-class technology, and even venture capital to get involved in innovation on an international scale. According to Startup Hungary's 2021 survey, 55% of Hungarian startups have strategic collaborations with a large corporation and 25% of them develop innovative solutions together with them. The past few years have seen a rapid increase in corporate players offering some type of startup program and collaboration opportunity. Microsoft for Startups[2] is one that offers free access to technology, coaching, and marketing support.

**2** Microsoft for Startups; https://foundershub.startups.microsoft.com/apply

# People & Team

PEOPLE & TEAM

# The hunt for talent

**What kind of talent do you need the most?**
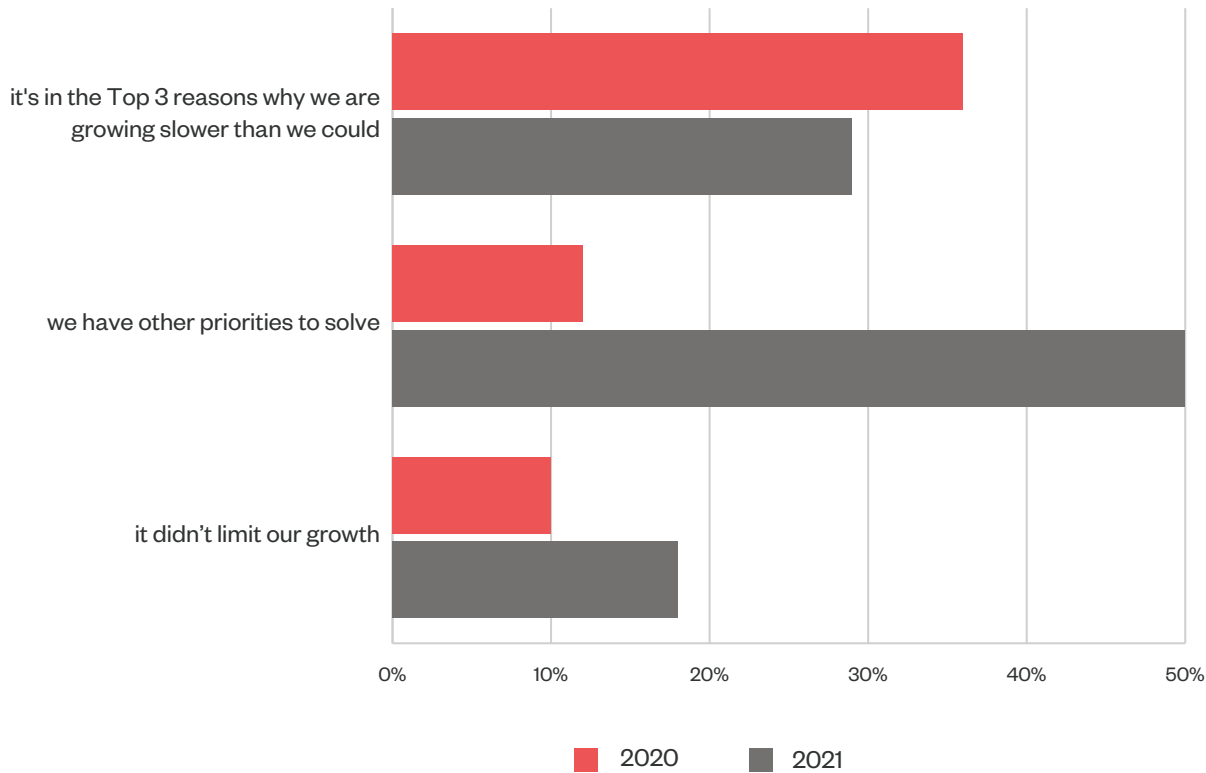*% of all respondents, $n_{2020}=232$, $n_{2021}=212$*
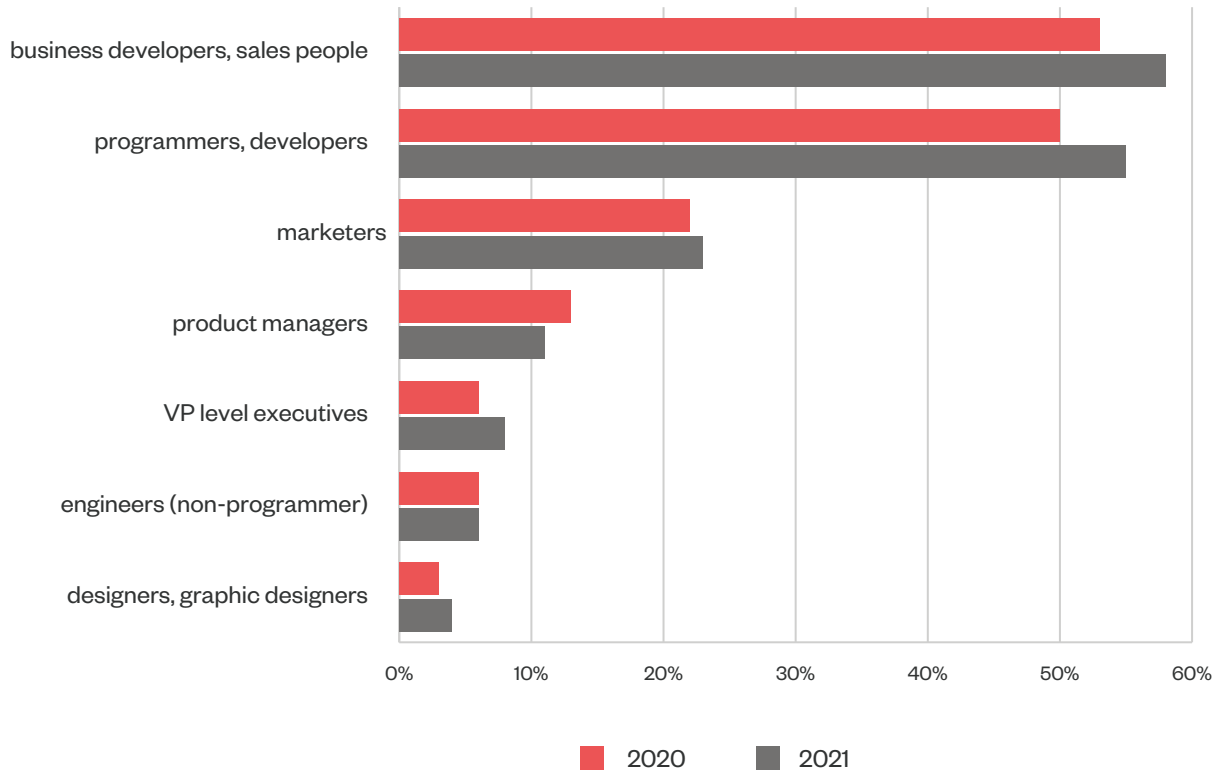
2020    2021

*among champions, n=27, among pretenders, n=54*

champion    pretender
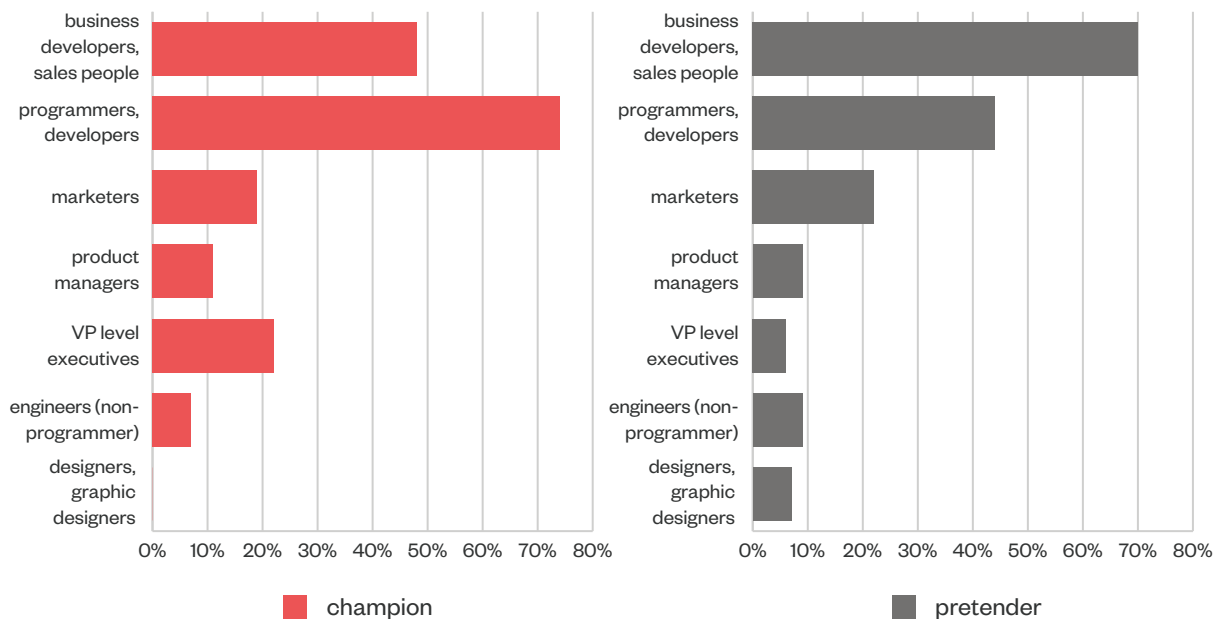
**How seriously is not finding team members affecting your growth and development?**

*% of all respondents, $n_{2020}=232$, $n_{2021}=212$*



| | 2020 | 2021 |

*Source:
Startup Hungary*

**Tamás Ábrahám**
Co-Founder at DevQuarterly

# Startups on the CEE developer market

All startups struggle to hire developers. But understanding the market for software engineers in Central-Eastern Europe provides a new, data-based perspective on the present and future of the local startup scene - shedding light on HR and business-boosting insights, especially in light of recent global events and recruitment trends.

At DevQuarterly we collect and analyze 6,000 job posts daily in order to connect supply and demand on our developer marketplace.

*For this report we took a closer look into the CEE region and analyzed the tech, funding, team and hiring data from 120,000 job posts by 15,000 companies actively looking for software engineers in the region.*

These companies employ a staggering 389,000 developers in the region. A quarter of the assessed companies could be categorized as startups, with a 12% share of the entire software engineering market. The rest of the tech talent pool is employed by agencies, SMBs and enterprises.

Despite their relatively low market share, startups tend to be the most active on the labor market - responsible for 50% of total job posts.

*Separating local and foreign startups highlights an interesting difference in their hiring activities: foreign startups are twice as active in the region (36%) than those with actual CEE headquarters (16%).*

Average software engineering salaries show no significant differences in the region. All CEE countries offer salaries and contractor rates within a 20% range. Despite the sharp increase during recent years, hiring developers in the UK or US is still twice as expensive on average, but our region is becoming less of a low-budget alternative for Western Europe. The experience level highest in demand in CEE closely follows the global trend: 85% of job posts are advertising mid-senior positions.

Dividing employers into four different categories reveals some interesting differences. The market shares of foreign startups, startups with CEE headquarters, agencies, SMBs and enterprises vary between countries significantly.

*Hungary has one of the lowest percentages of developers working at startups. At only 7.31% there's a lot of room for local startups with a strong employer brand, healthy developer culture, and truly competitive compensation package to grow by hiring from traditional companies, both small and large[1].*

---

1 https://public.tableau.com/app/profile/andras.toth6202/viz/SH2022/Dashboard1

*A peek into the near future*

There are three major dynamics shaping the current CEE developer market and none of them are likely to ease the current hiring challenges.

1.  The increasing demand and global shortage of experienced tech professionals is getting more intense. Record amounts of investment funds are flowing into tech startups and digital transformation accelerated by COVID means more open positions, more demand for contractors and even higher salaries and rates.

2.  The combination of remote work, massive arbitrage opportunities in salaries and more efficient global recruitment tools puts local startups at an extreme disadvantage. With developer salaries 2x and even higher in the US and UK, competing for local tech talent with these companies will probably get more challenging.

3.  Due to the Russian invasion of Ukraine and the subsequent Western sanctions imposed on Russia and Belarus, the Eastern European IT landscape has changed overnight. Gartner estimates there are over one million software engineers and 115,000 of them already work at companies that also have CEE teams—one of the few regions where foreign companies will turn to to rebuild their offshore teams.

*In order to keep nurturing their engineering teams, Hungarian startups will need to keep up with the global competition in terms of comp packages, developer culture and employer branding while getting more efficient at recruitment and even contracting.*

The massive increase in funding rounds we've been seeing definitely helps and so could the widespread adoption of employee stock ownership plans (ESOP), increasing nearshoring activities and more junior programs.

# Average number of teammates

**How many team members do you currently have in the company?**

*% of all respondents, total n=212, champion n=27, pretender n=54*



Legend: total, champion, pretender
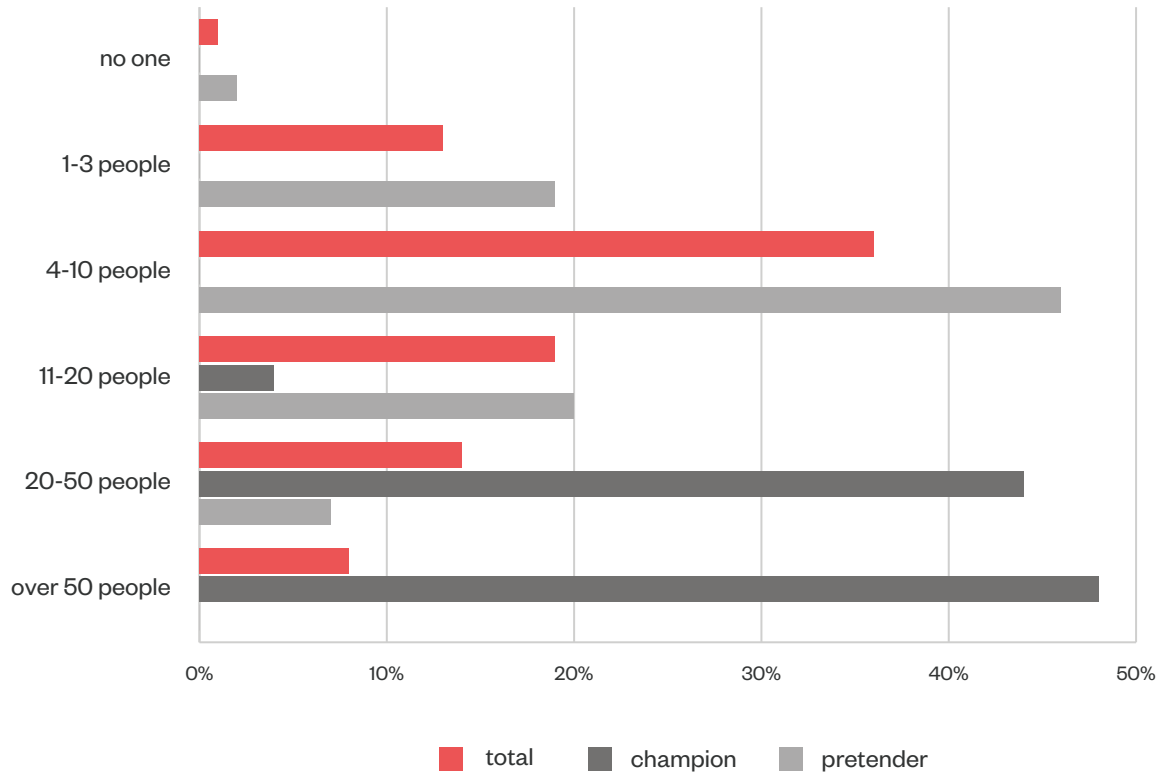
*Source:
Startup Hungary*

# Spendings on employees and on third party services

**How much of your spending goes to employees / products & services in Hungary?**
*% of all respondents, n=212*



Legend: <10% | 10-25% | 26-50% | 51-75% | 76-90% | >90% | no answer
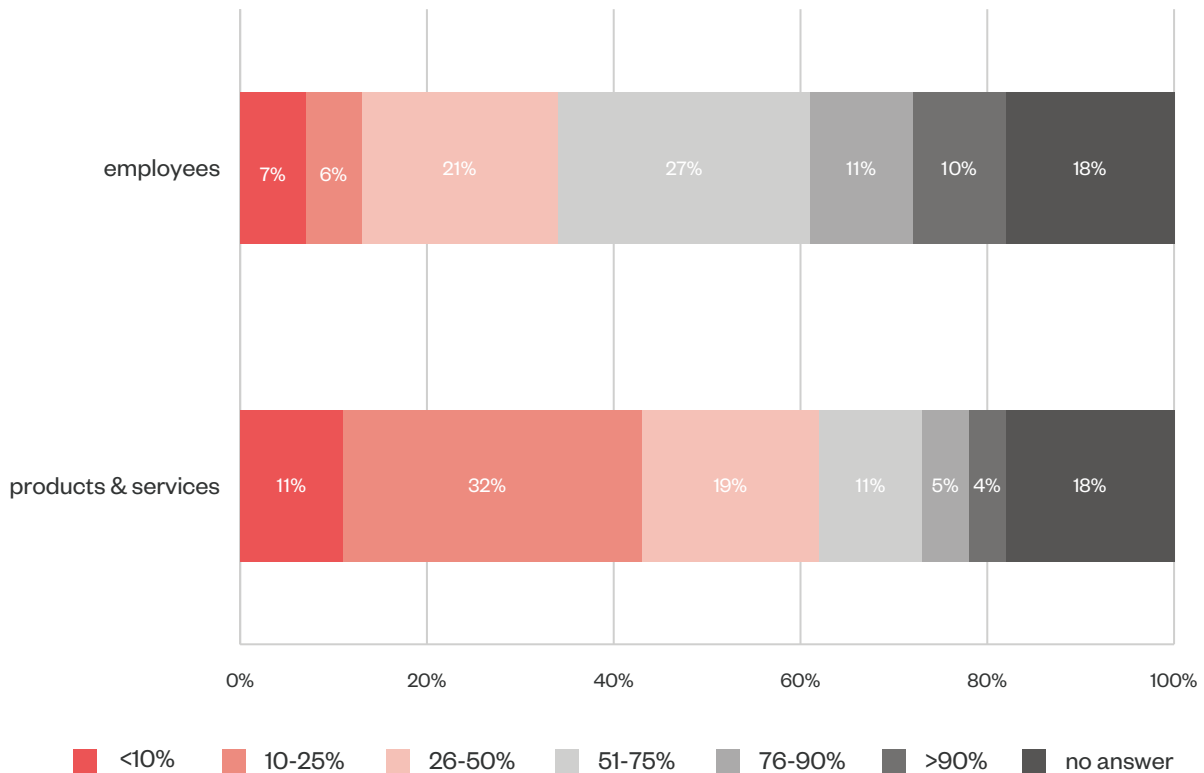
*Source:*
*Startup Hungary*

# How many team members are actual employees?

**How many team members have employment contracts?**
*% of all respondents, $n_{2020}=232$, $n_{2021}=212$*

| | no one | less than half | approximately half | more than half | all of them | no answer |
|---|---|---|---|---|---|---|
| 2020 | 19% | 18% | 13% | 18% | 21% | 13% |
| 2021 | 14% | 16% | 12% | 22% | 25% | 11% |

■ no one  ■ less than half  ■ approximately half  ■ more than half  ■ all of them  ■ no answer
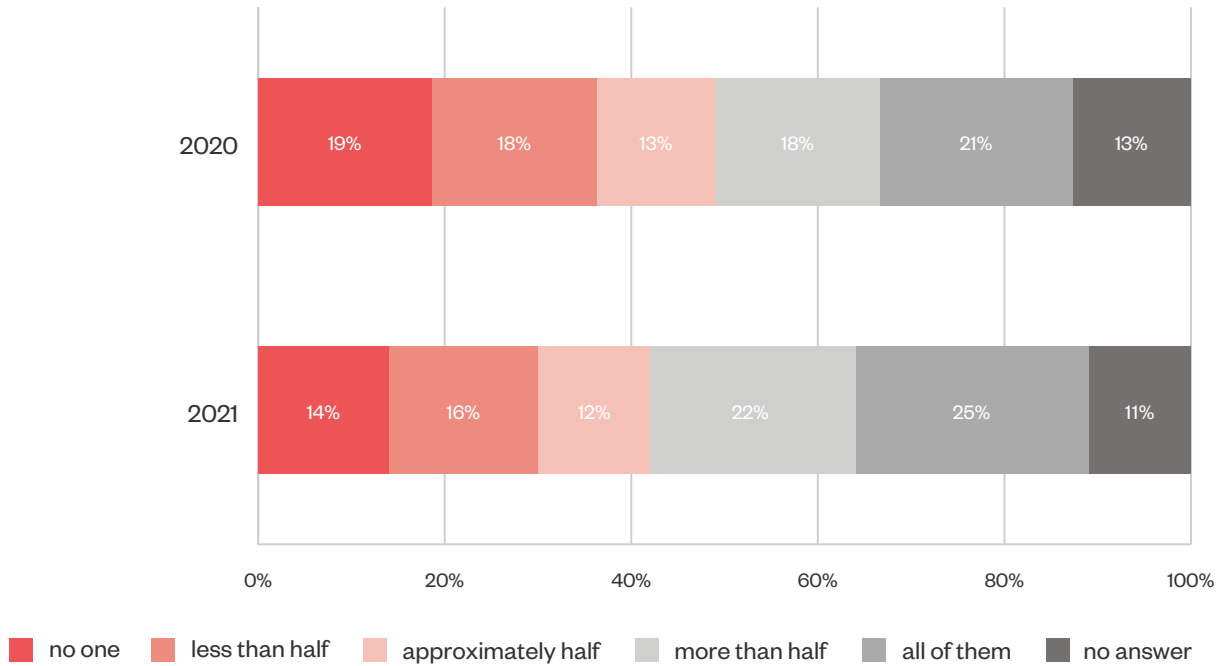
*among champions, n=27, among pretenders, n=54*

■ champion  ■ pretender
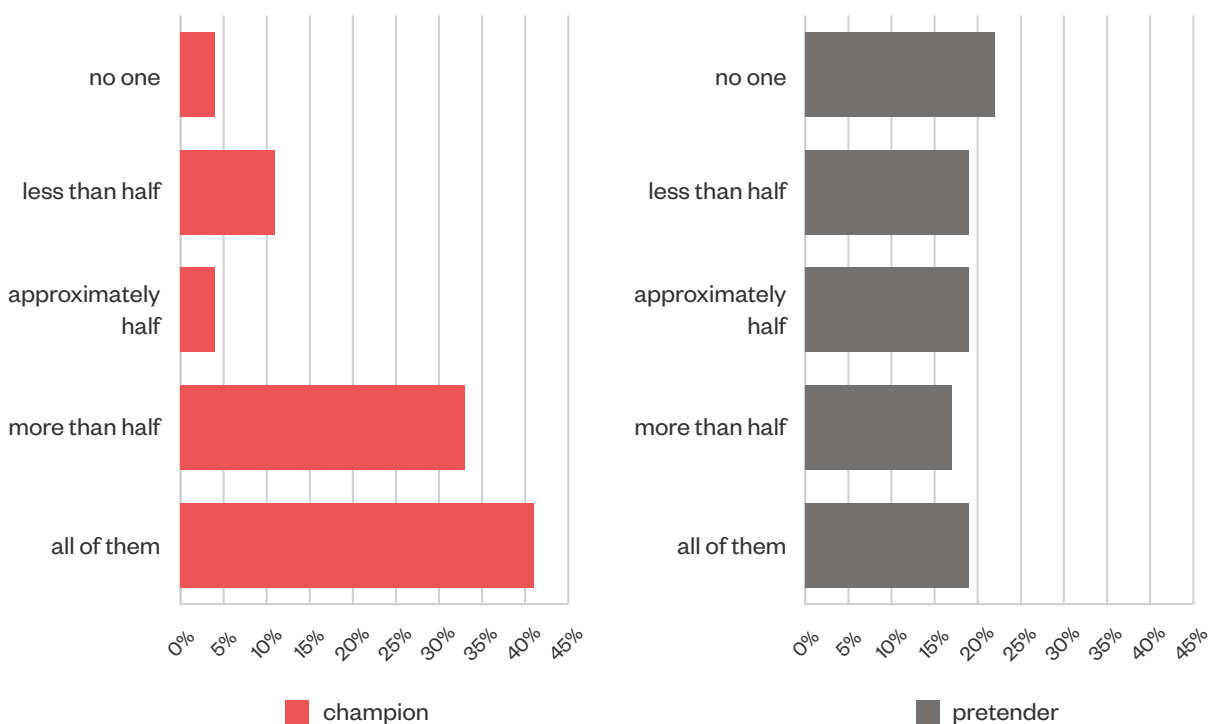
# The numbers behind ESOPs

**Do you have an ESOP? If yes, how big is it?**
*% of all respondents, $n_{2020}=232$, $n_{2021}=212$*

Legend: >11% | 5-10% | 1-4% | no ESOP | no answer

*among champions, n=27, among pretenders, n=54*

Legend: champion | pretender
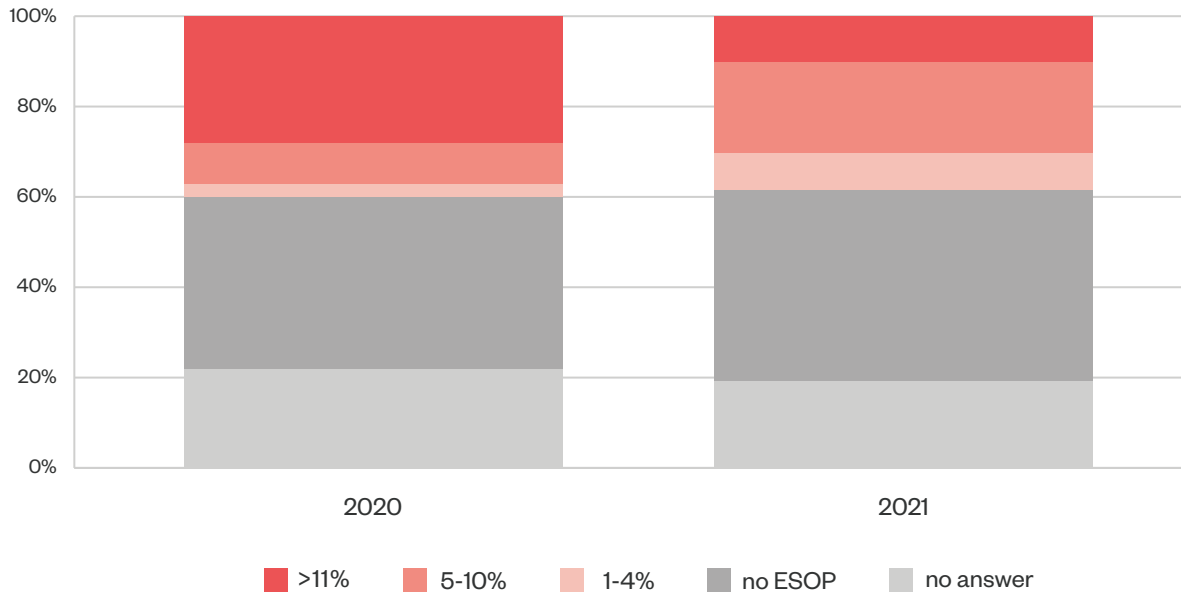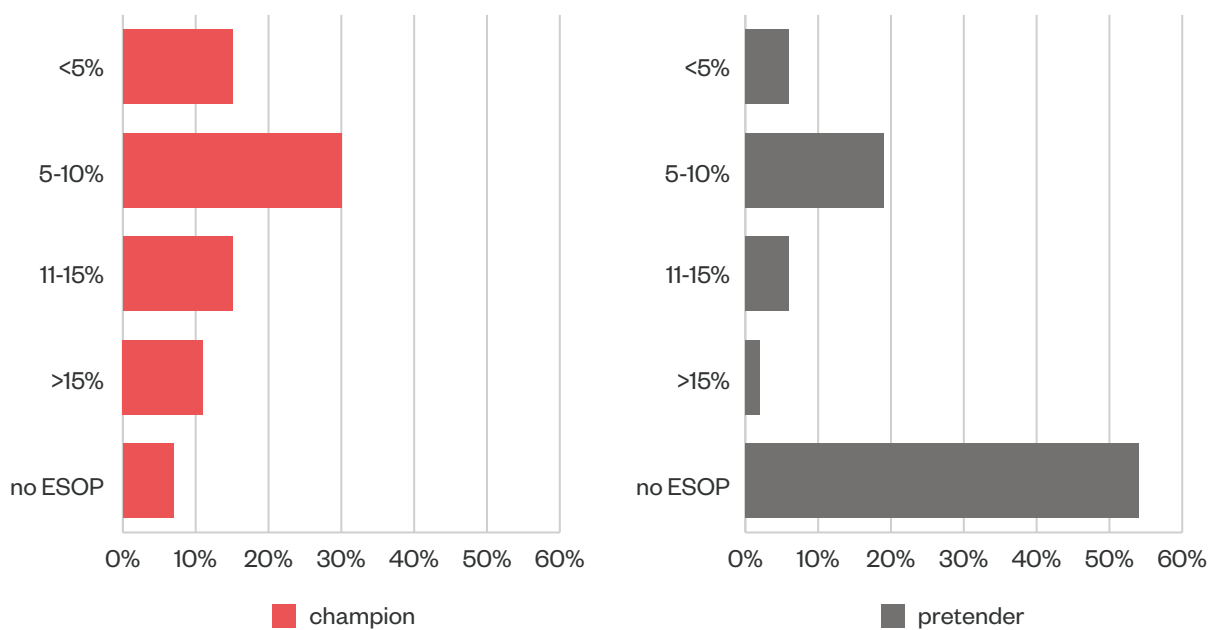
# Industries where startups offer employee stock options

**Do you have team members who own ESOP in your startup?**

*% of respondents / vertical, n=18-47 / vertical, total = 212*
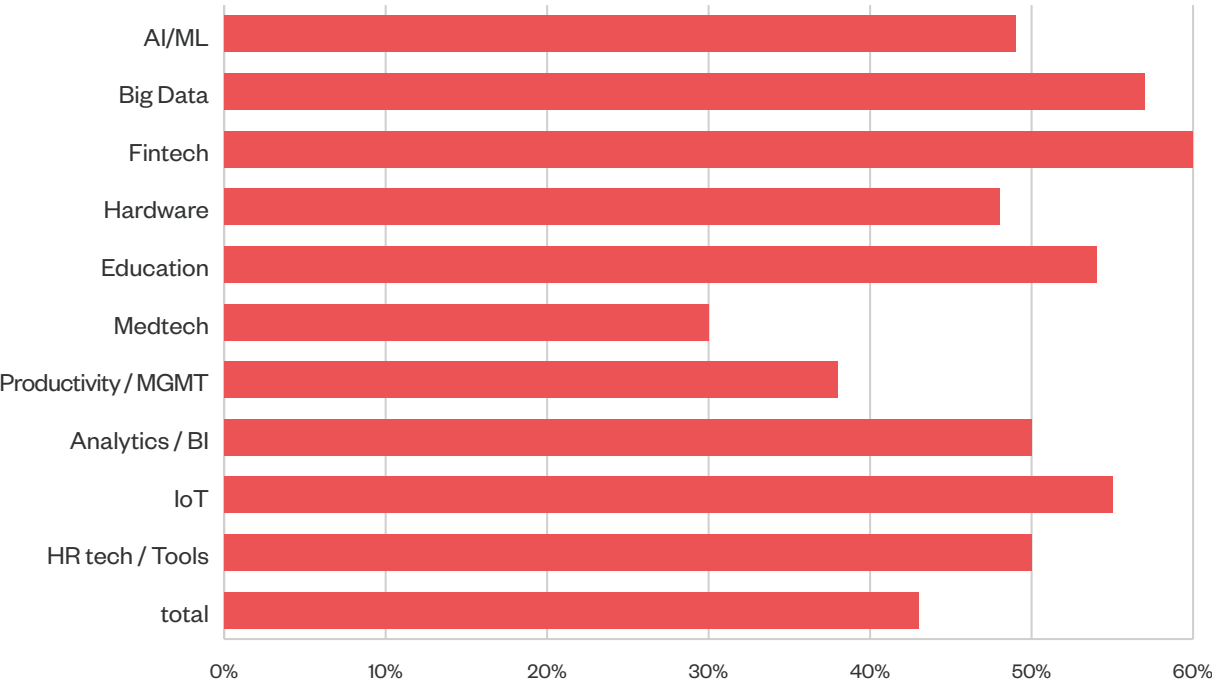


*Source:*
*Startup Hungary*

# How many startups employ foreigners?

## What proportion of all team members are foreigners?
*% of all respondents, total n=212, champion n=27, pretender n=54*



Legend: >20% | 10-20% | <10% | no one | no answer
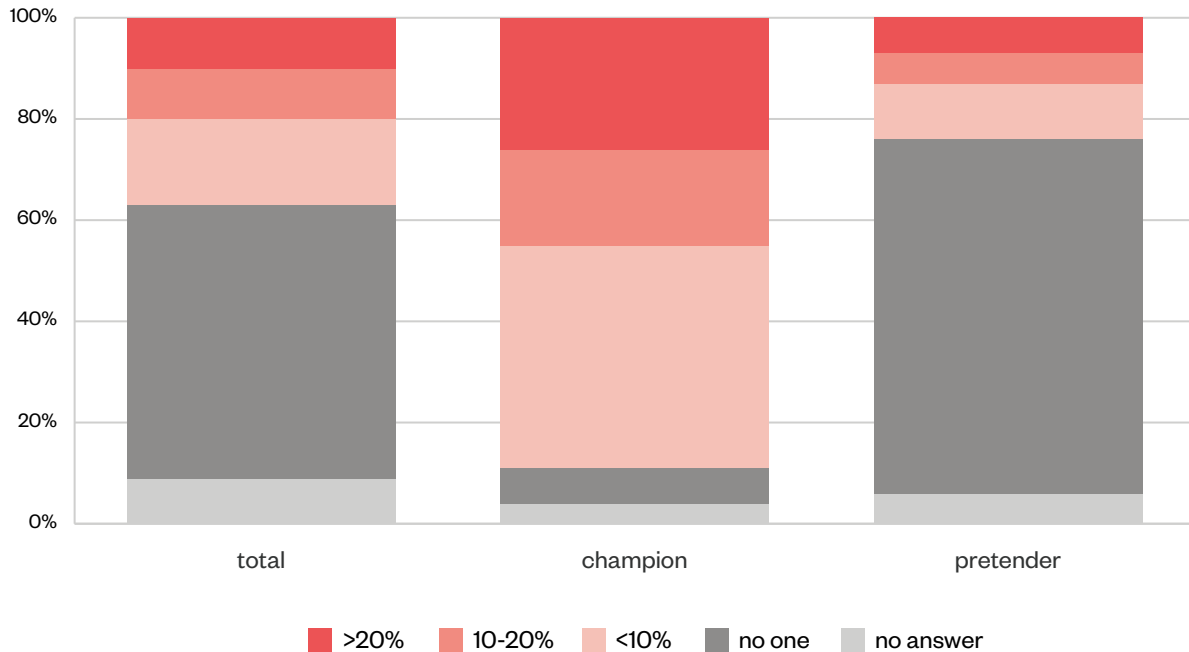
*Source:
Startup Hungary*

## Where are they from?
*% startups with foreign team members, n=97*



| Country | % |
|---|---|
| USA | 22% |
| UK | 16% |
| Germany | 8% |
| Poland | 7% |
| Slovakia | 6% |
| Ukraine | 9% |
| Romania | 12% |
| Austria / Czech Republic / Serbia | 10% |
| other country in Europe | 24% |
| countries outside Europe | 15% |
| other | 10% |
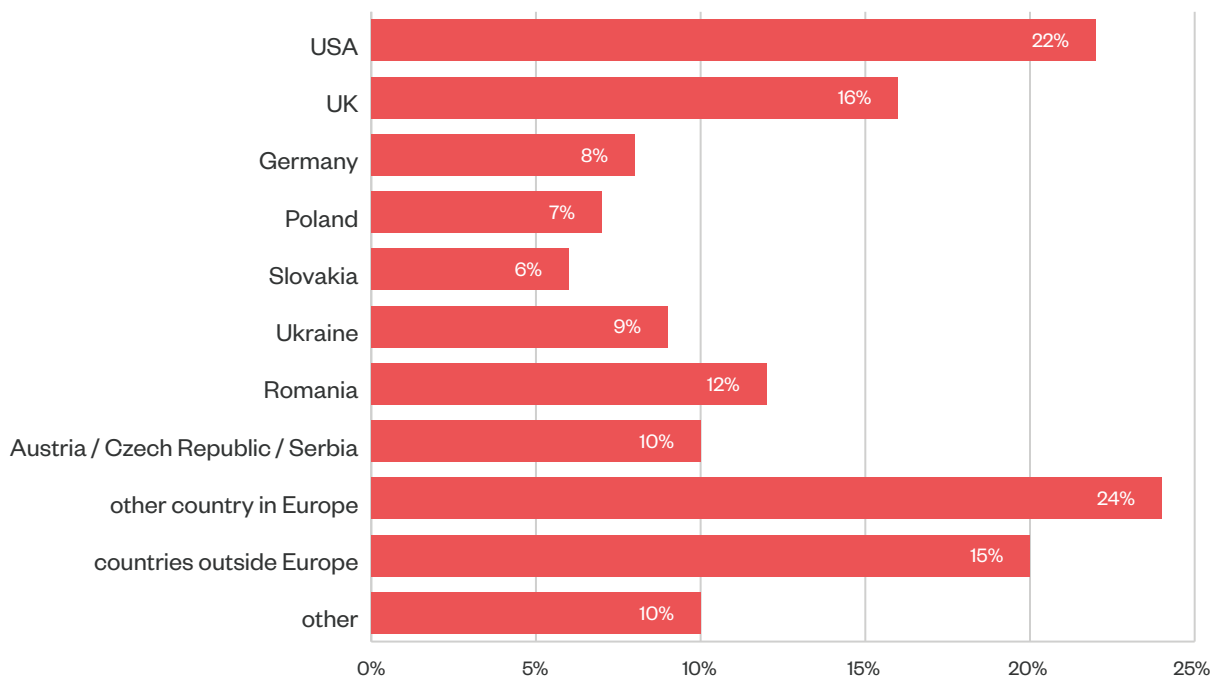
**Veronika Pistyur**

Partner at Oktogon Ventures,
Co-Founder at Bridge Budapest,
Co-Founder & Board Member at Startup Hungary

# Business is about connection

Business is about connection. If we don't connect well, our relationships with our colleagues and partners won't work. The business will suffer and so will the client. Business itself is a cycle.

*It's not just an enterprise and a product that has a life cycle, but also the mechanism that stems from supporting each other.*

Every iota of support we get can be used to benefit our business. In the meantime, we can also become capable of giving. Not giving back, but simply giving - because we know that though it might seem like additional work, it truly multiplies our relationships. Exactly the ones that business is built on, and that it can build and grow with.

Paying attention to colleagues and business partners results in higher profits and more loyal employees, as well as a sustainable long-term business. This has been demonstrated time and again by research.

*Because of the pressures of scaling in startup world, the significance of this cycle, our relationships and their quality, is exponential.*

How many times have we experienced a connection (an 'intro' as it's trendy to say) that opens a door, or eases a process. We can win back tons of time with it.

I've often seen that in the first years of an enterprise there is so much emphasis on focus that there's no time to give. Receiving is almost an expectation. From the first employees, mentors and investors, to an abstract ecosystem. We understand that on the employee side, reciprocity is necessary, because without motivation the desired interaction can't exist. But few understand why it's important to play an active role in the communities that are important to us in these years as well. It can seem like a waste of time. However, if the cycle's ideas and needs don't happen, the system is constantly faulty.

An ecosystem works well if the connections within it work well. This doesn't imply a direct reciprocity in every situation. What usually happens is that we give in one direction, what we get from another.

*Giving is also energizing from a psychological standpoint. So even if it costs time, it also recharges, which has its own returns.*

And you don't have to think of big things. We can give by providing direct answers, instead of avoiding conflict with time-wasting avoidance tactics. We also give, if we make time each month to help those, who are one phase behind us, because our knowledge can speed up their learning - the same way we expect those one phase ahead of us to do the same for us.

This cycle is the driving engine of the world's most developed tech hubs. PayPal, Skype, and also Prezi and Ustream have

a reputation for enabling a rich store of knowledge sharing and growth through the ecosystem's that developed around them and within them.

*We can see that the employees of a successful team or exit try to give back by returning to the system as mentors and investors.*

This is noteworthy, and has exponential significance, because their knowledge and experience, their connections can save new enterprises years of work. But you don't have to wait that long. Everyone can find a way to keep the cycle going, in their own phase on their own level, and can take advantage of the positive, self-perpetuating effects of being able to give.

Let's not misunderstand.

*Nobody is expecting a superhuman achievement. Just mindfulness, in how we relate to the culture of giving. To be a founder, is to lead.*

And to be a leader, is the expectation that we always do a little bit more than we have to. This catalyzes an infinite amount of energy, making the stakeholders of an ecosystem more successful. Let's give mindfully! Don't always look at where you will get it back. At some point it won't be a question any more. The cycle always comes full circle.

# Policy & Regulations

# Relevance of legal issues

## How relevant are the following legal issues to your startup?

*% of all respondents, n=212*



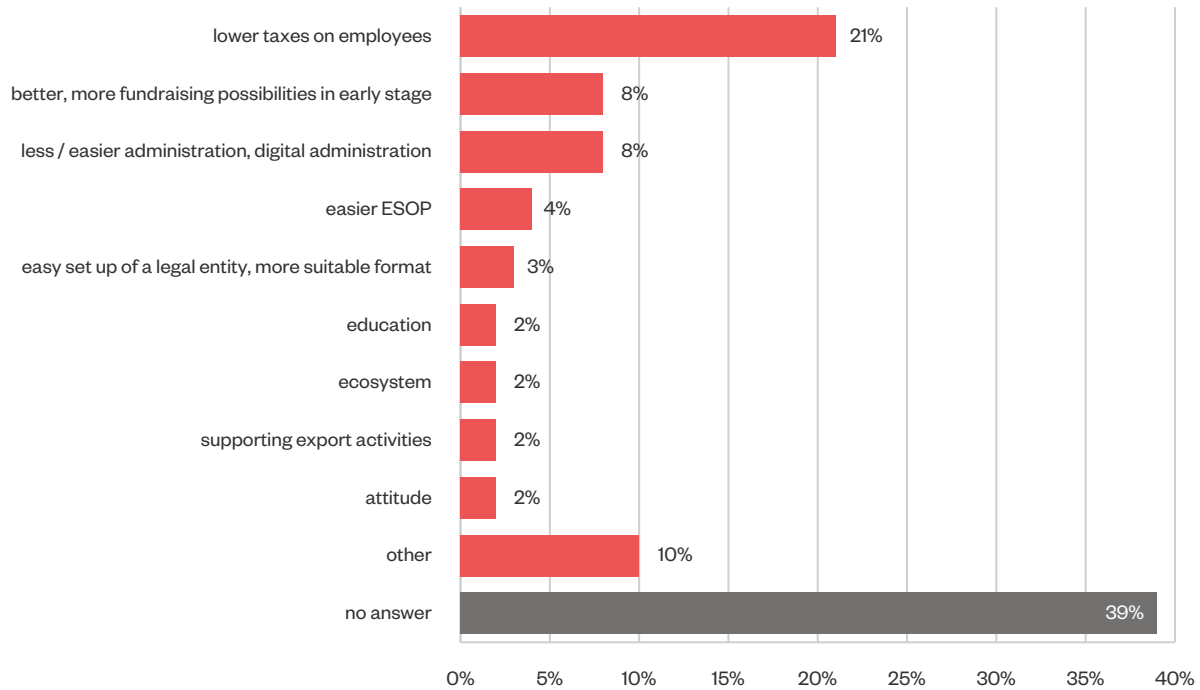| | | | |
|---|---|---|---|
| ■ not an issue | ■ moderate issue | ■ major issue | ■ no answer |
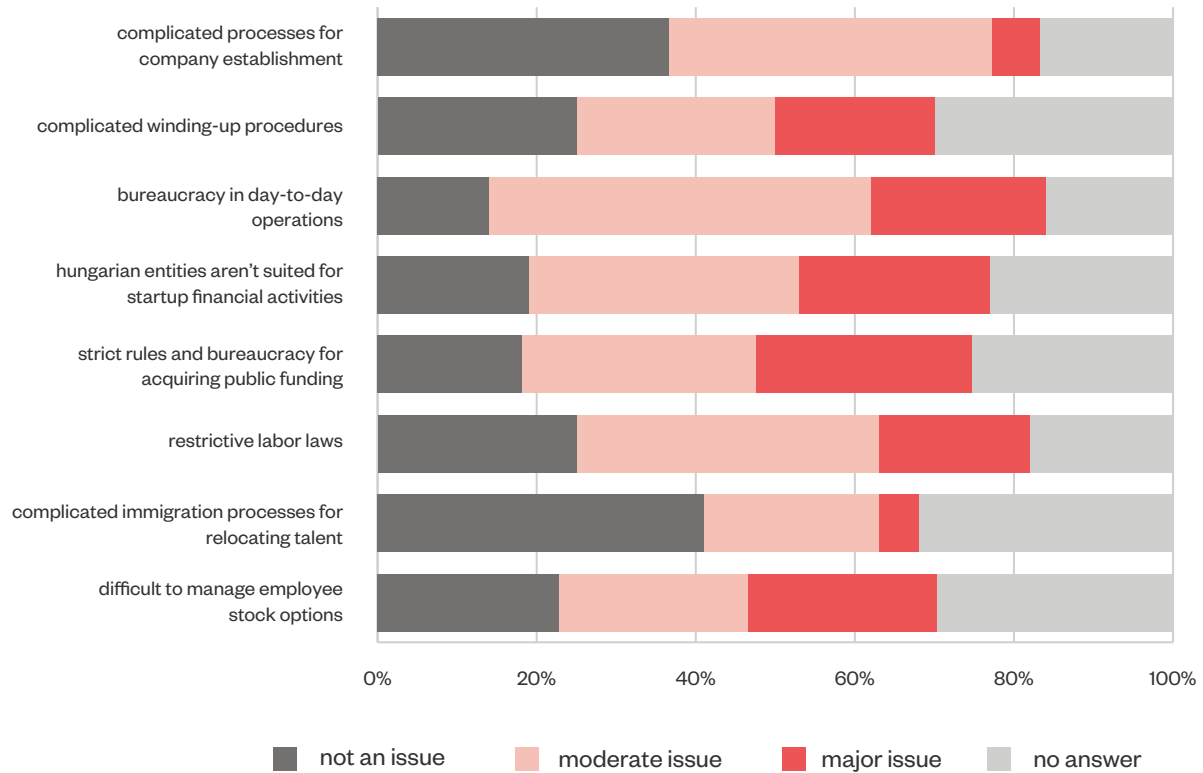
# What would be the most important to support the ecosystem

**What policy or regulations would you change to support the startups?**

*% of all respondents, n=212*

**Jared Schrieber**

Co-founder of Numerator
(a Silicon Valley unicorn),
Hungarian Angel Investor

# It's time to remove obstacles for Hungarian founders

Great founders are exceptional athletes when it comes to overcoming the myriad business and technical challenges faced by every startup. Starting and building a successful venture can feel like a non-stop sprint where you run at a pace that is faster than you have ever run for a duration that often seems like it will never end. The last thing any founder needs is a few extra hurdles thrown in their way, yet that's exactly what Hungarian founders face relative to their peers in other countries.

Since moving to Hungary from Silicon Valley three years ago, I've been learning all I can about the Hungarian startup ecosystem and how it operates. By starting my own venture here and by investing in and advising others (both as an angel and as a limited partner in several venture capital firms), I finally feel confident enough to share my concerns regarding the extraordinary challenges faced by Hungarian startup founders.

If you're about to found a startup in Hungary and you speak with three different lawyers about what type of legal entity to establish, you're likely to get three different answers: a Kft, a Zrt, or a UK Ltd. Why? For one, a Kft doesn't support different classes of shares (ownership) and registered shares in a Zrt create administrative nightmares as new shareholders are added. This results in founders and lawyers performing acrobatic feats to create side agreements, 'share quotas' and 'phantom shares' which attempt to overcome the limitations of Kft's and Zrt's. This is also a reason why so few employees at Hungarian startups are incentivized with equity. Yet, stock options are the core to attracting and retaining top talent in startups elsewhere.

Such legal gymnastics are a waste of resources (people, time and money) which actually result in even more pain for Hungarian founders when they go to raise Seed or Series A funding from foreign investors. It's no wonder those investors require Hungarian startups to move their legal headquarters to the US or UK as part of their funding terms - costing the startup as much as 50.000 Euro to untangle the mess formed from years of creative legal workarounds.

That is, of course, if the founders are amazing enough to hurdle their way to a Seed round. Before that, they'll almost certainly require a healthy amount of Pre-Seed funding. But in Hungary, those first investments are either incredibly hard to come by and/or come with very bad deal terms. Why? Besides the fact that there are only a few Hungarian angels able to write meaningfully-sized checks, a couple of additional barriers stand in the way. Namely, the primary vehicles (Convertible Notes and SAFEs) by which founders in developed ecosystems secure Pre-Seed investments are not available to Hungarian founders. Hungary will not allow an angel investor like me to invest in startups via Convertible Notes because these special 'loans' require a banking license. And, while SAFEs (Secure Agreements for Future Equity) are clearly not loans, they raise a number of additional issues within Hungarian legal and regulatory frameworks that must be resolved before founders, lawyers and accountants will readily adopt this otherwise ideal tool.

*We are forcing Hungarian founders to start their race in Trabants because Mercedes and McLarens are banned in Hungary.*

Only by living and working here am I able to truly appreciate how lucky I was to found my startup in Silicon Valley. I took for granted the ease with which I could establish the right legal entity (a Delaware C corporation), the right way (e.g., common stock for founders with vesting), and raise initial angel investment (via a Convertible Note). Even with such an incredible head start, I still almost failed. Without the support of other founders to help me navigate the pitfalls of fundraising, focusing on traction and finding product-market fit, my startup would have failed. Had I attempted to launch my startup from Hungary, I have no doubt that instead of reaching orbit, it would have failed to even leave the ground.

It's for this reason that I'm proud to be partnering with Startup Hungary and the startup community to thoughtfully and thoroughly remove the hurdles that have tripped up all too many Hungarian founders.

*With support from our government counterparts, we can clear the path for Hungarian founders to sprint instead of hurdle.*

Fortunately, countries like Estonia and most recently Lithuania have already taken these steps to create remarkably vibrant startup ecosystems. Those countries don't have more talent, larger markets or more beneficial historical legacies to thank for their success. They can thank the leading founders, investors, lawyers and government officials who worked together to remove the same kinds of hurdles Hungarian founders still face. Thanks to their example, we have a step-by-step guide of what must be done. The only question that remains is a question of will. Will we simply resign ourselves to the way it is, or will we find a better way? If we deserve to be called entrepreneurs, then there is only one path forward. It's about time we pave it together!

# Perception of regulatory environment in Hungary

**To what extent do you agree or disagree with the following statement?**

*% of all respondents, n=212*



strongly agree    somewhat agree
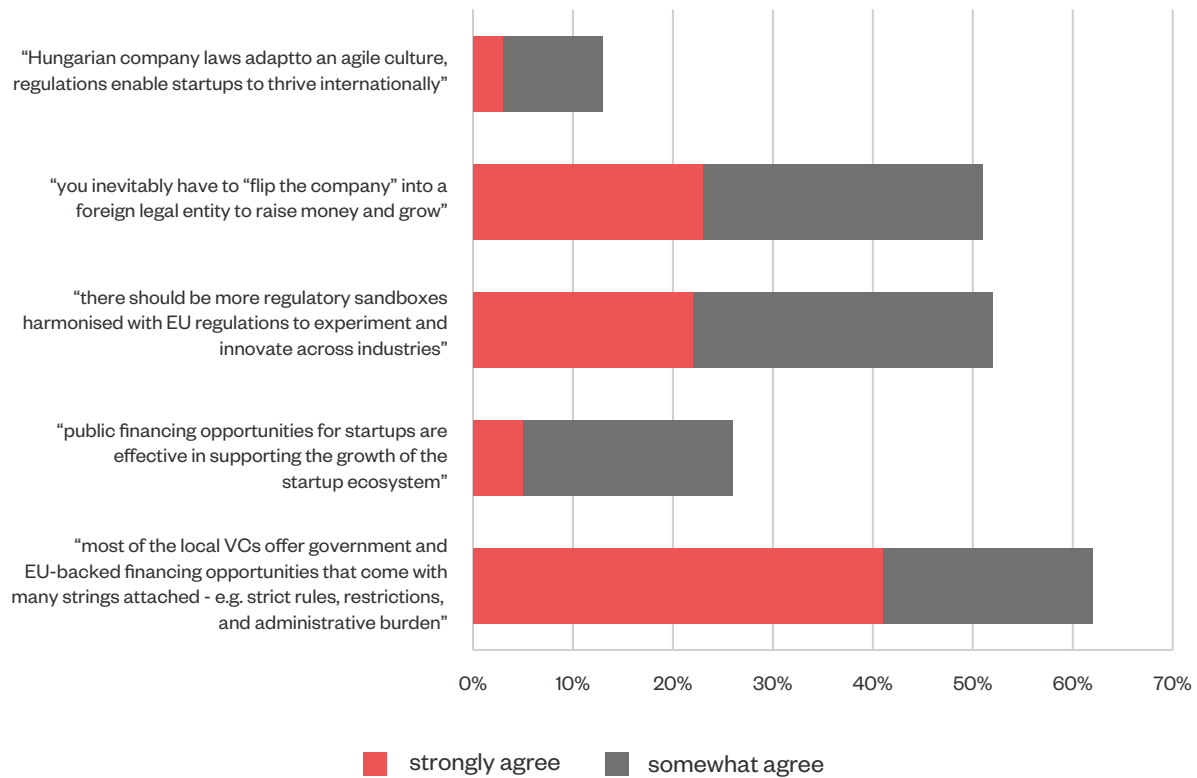
# Startup Visa & ESOP policy

**Usefulness of Startup Visa program and ESOP**

*% of all respondents, n=212*

Startup Visa

ESOP

| not useful at all | somewhat useful | useful | extremely useful | no answer |
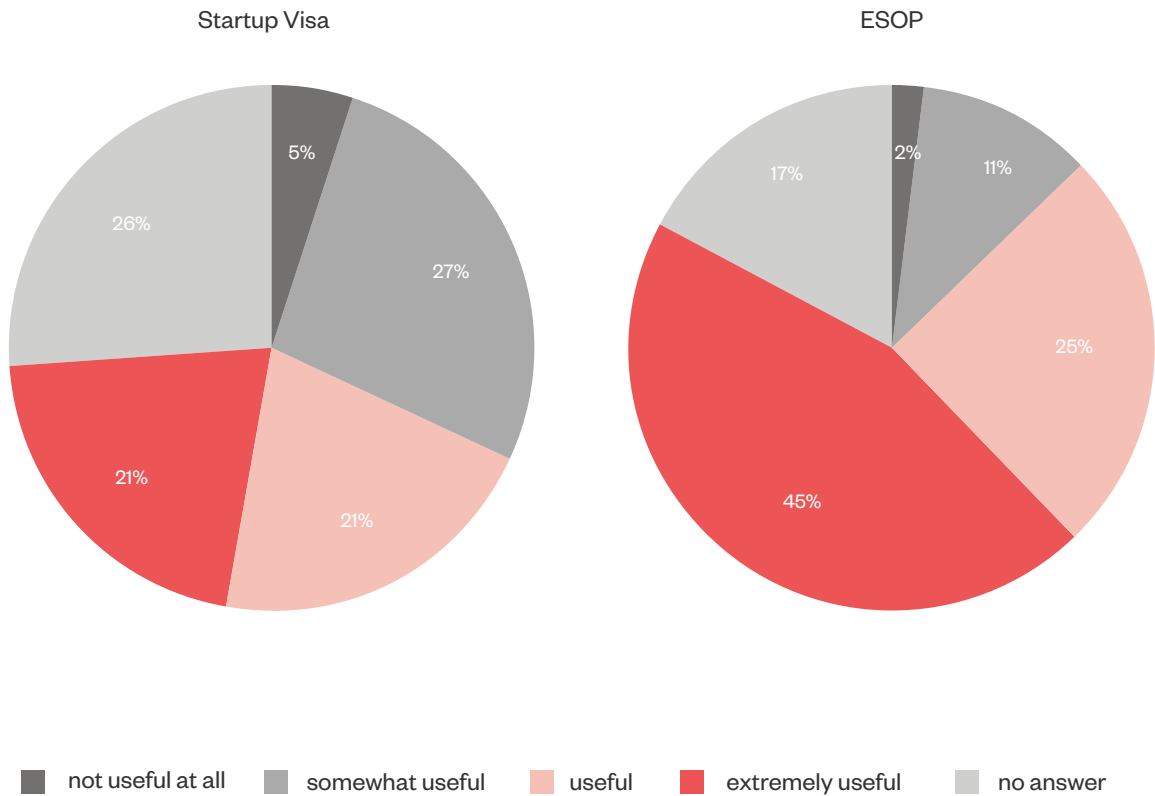
**dr. Attila Pintér**
Lawyer and Office Manager at
PV Partners Ügyvédi Iroda



**dr. Ivett Balogh**
Trainee Lawyer at
PV Partners Ügyvédi Iroda

# Motivating employees towards a successful exit

Companies are always struggling to find ways to motivate their employees, ways to make them more committed and to prevent high employee turnover. And one of the best solutions to all of these problems is the employee stock ownership plan, or 'ESOP.'

A start-up often faces liquidity problems during its launch. Perhaps we can say one of the biggest reasons for this is the wages of the employees. An ESOP offers a solution by letting certain employees acquire a share in the company, instead of wages, at a certain point in time. This moment is usually linked to an exit event - which is either a full takeover of the company or a partial buy-out, or an IPO.

*The payment of the employee's actual wages is linked to this uncertain future exit event. This intrinsically supports an employee's motivation, as the employee may receive a larger payout on exit if the company is more successful.*

How does an ESOP work? Key employees do not acquire any ownership of the company until the exit event occurs. The ESOP agreement between the current shareholders of the company and its key employees, is only a contractual agreement between the parties. It does not create any company law legal relationship. Key employees can only acquire so-called virtual shares.

For those virtual shares to be created usually the founder, or the investor, gives up a part of their share of the company. This does not mean that the key employee will be entitled to participate in the management of the company as a shareholder - even if they fulfill the conditions set for the ESOP. After completing all the obligations for the ESOP, the employee has the opportunity to purchase the ESOP share for a symbolic amount of money. Later, in the event of an exit, they can convert this into an actual share, which they can then sell at a real price of the share. The difference between the cost of converting the virtual share (e.g. EUR 1) and the actual market value of the shares (up to several million EUR) is the reward that makes it worthwhile for the employee to participate in the ESOP.

*In practice, ESOP opportunities usually benefit key employees whose work is essential to the operation of the company.*

Key employees can only be eligible for ESOP if they fulfill the relevant obligations.

The eligibility of key employees for ESOP usually depends on two important factors: the achievement by the key employee of the objectives set by the company, which is usually closely linked to the success of the company but is not necessarily based solely on rigorous financial data.

The second factor for ESOP is the passage of time. Some companies relate the ESOP rate of their key employees to

the length of time they have been with the company. This period is known as the vesting period, during which the key employee's ESOP shares increase at a rate agreed to by the parties (vesting). This is mainly used by companies in the field of IT, where employee fluctuation is high, in an attempt to maintain employee interest in the company.

Usually, the duration of a vesting period is 1-5 years, however, the new economic situation brought by the COVID-19 virus has significantly shortened the time to acquire a share, with some companies making the employee's share available after one year. Another way of calculating ESOP is reverse vesting, whereby a key employee will be entitled to the full amount of ESOP shares from the beginning but loses those shares in the event of employment termination, at a rate determined by the elapsed time between the beginning- and the termination of employment. The aforementioned rate may be set by the parties in years or months.

In Hungary, setting up an ESOP is purely based on the contract law, and can be implemented by the founders granting employees a pre-emption right, which comes into effect if the employee fulfills the objectives (KPI – key performance indicator) set at the time of the establishment of the pre-emption right. Based on our experience, these KPIs are very familiar with standard contract conditions in the US.

We can see a positive trend in both the legislature and the companies that have started a movement to introduce these programs in some form, adapted to the Hungarian legal system. However, there's still only a small community of teams motivating their employees this way.

*To encourage more people to adopt an ESOP, it would be necessary to bring the thinking of both employers and employees closer together, as well as to create an appropriate legal framework to ease the process.*

The previously described virtual shares-based and hybrid corporate law-based ESOP system could be useful for Hungarian companies and is clearly crucial for startups.

At the moment, Hungarian law enables the functioning of an ESOP-like system, called an 'employee shareholder program' (munkavállalói részvénytulajdonosi program, 'MRP' in Hungarian). It is important to highlight that the ESOP, used in the field of venture capital investments, is not the exact equivalent of the Hungarian MRP system. The MRP system might be prohibitively expensive for startups despite the related claimable tax allowances. Thus, it would be important to create a beneficial ESOP system for startups and midsize SMEs.

Although this new system might reflect the MRP regulations, which currently are only applicable in the case of PLCs (Zrt., Nyrt.), they have to be simpler, and easy to use and execute for all sorts of companies. They also need to require less administrative burden (by creating model articles/templates approved by the Hungarian legislator). Finally, the new regulation necessitates the establishment of beneficial taxing conditions suitable for promoting the ESOP system and motivating its usage among Hungarian startups.

# Perception of upcoming EU regulations

**How familiar are you with the following upcoming regulations?**
*% of all respondents, n=212*



- I am up to date and aware of potential implications
- I'm familiar with some details
- I have heard of it
- I have never heard of it
- no answer
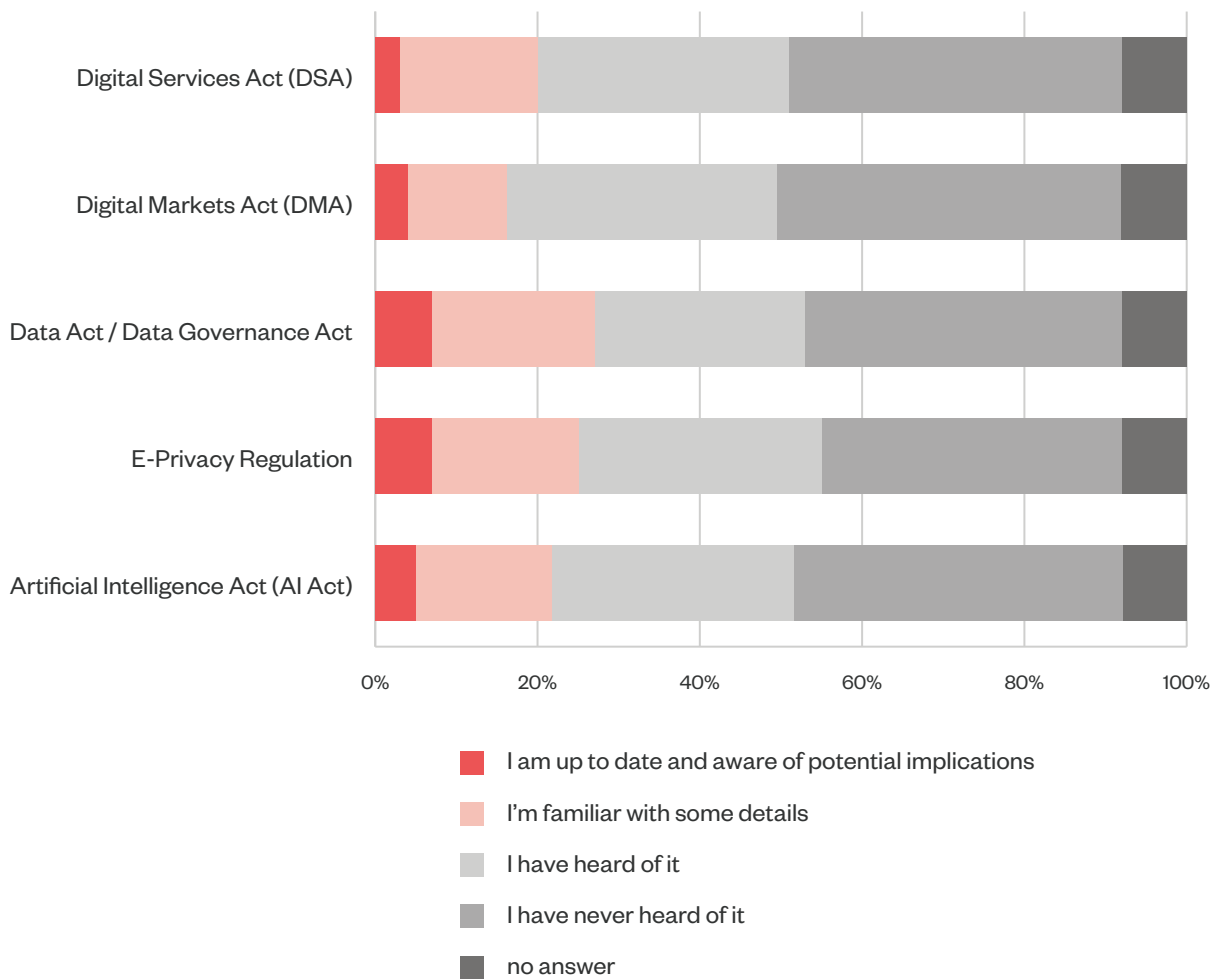
# Which regulations are a legal burden for startups

**How big of a legal burden is it today or would it be in the future for your startup to comply with the following EU regulations and circumstances?**

*% of all respondents, n=212*



Legend:
- it's not an issue at all (dark grey)
- it's a moderate issue (light pink)
- it's a major issue (red)

Data:
- existing data related regulations and privacy laws: -22, 45, 12
- upcoming data related regulations and privacy laws: -10, 29, 8
- upcoming platform regulations: -9, 39, 8
- different VAT thresholds, rates and application methods: -17, 39, 15
- fragmented sector specific regulations: -9, 30, 20
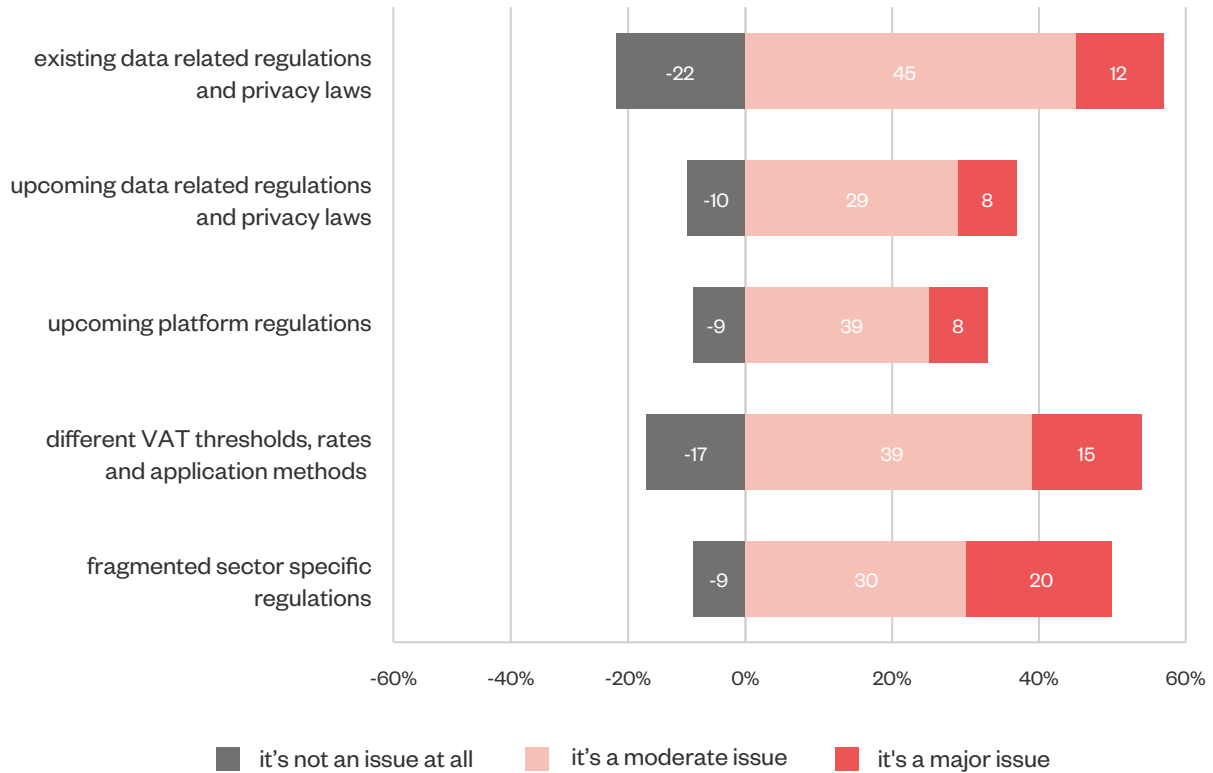
# Potential impact of platform regulations

**What impact might upcoming platform regulations have on your startup?**
*% of all respondents, n=212*



| | no impact | moderate impact | major impact |
|---|---|---|---|
| limitations or a full ban of targeted online advertising | -13 | 27 | 23 |
| 24-hour illegal content removal obligations, stay-down obligations, and mandatory random checks | -28 | 27 | 6 |
| repealing the Country of Origin principle in the EU (i.e. having to comply with local laws) | -13 | 25 | 19 |
| extra liability and hard to automate KYBC (Know Your Business Customer) obligations for marketplaces | -15 | 25 | 10 |
| major regulation increase after hitting a revenue or market share threshold | -9 | 25 | 16 |

# EU data privacy laws…

**To what extent do you agree or disagree with the following statements?**
**"European data and privacy laws and upcoming platform regulations…?**

*% of all respondents, n=212*



Legend: strongly agree, agree, neutral, disagree, strongly disagree, no answer
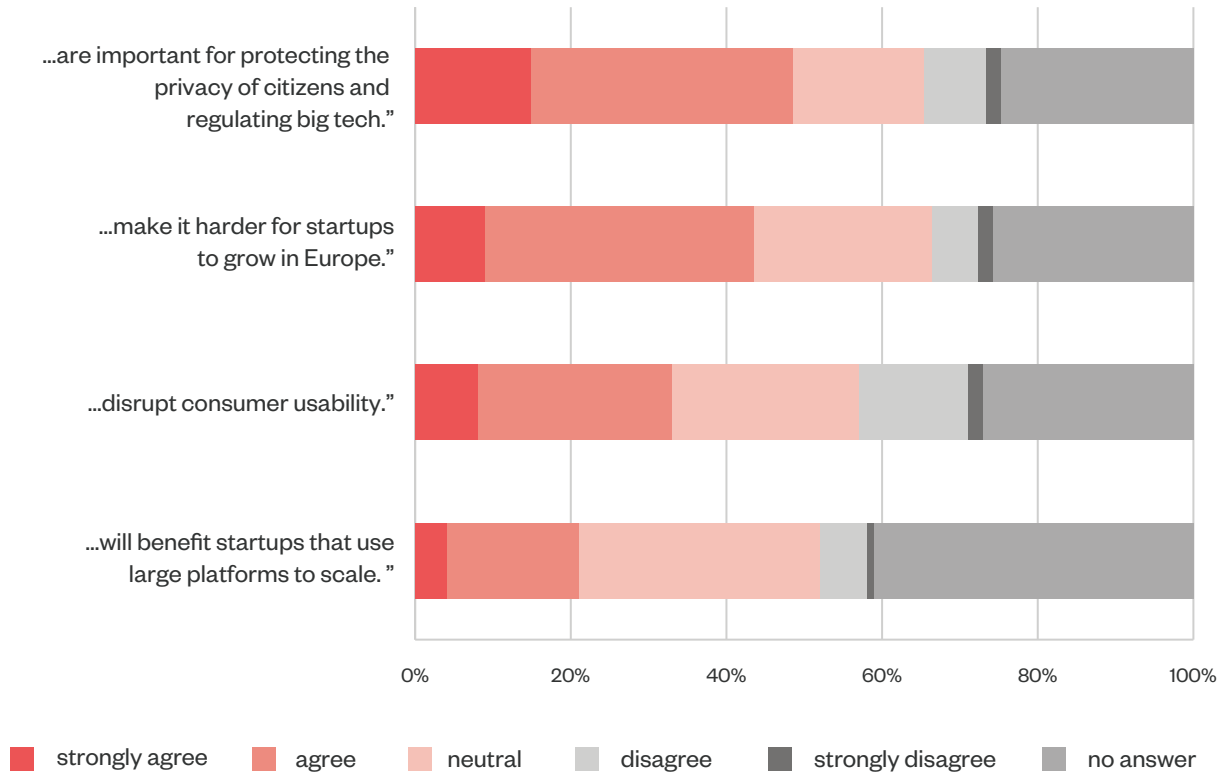
**Manon Tabaczynsky**
Senior Policy Officer,
Allied for Startups

**Benedikt Blomeyer**
Director EU Policy,
Allied for Startups

# EU legislation on data and platforms: why it matters for startups?

In the past two years, the European Commission has presented several legislative files to create an updated framework for the digital economy. Two key areas for startups are data and platform legislation. Overall, legislation can add complexity for startup entrepreneurs trying to navigate and scale within and outside the EU.

**Platform regulation.** In 2020, the European Commission proposed legislation on digital services (DSA) and on digital markets (DMA), targeting platforms of all sizes.

The first one, the **Digital Services Act** (DSA), will update the rules for platforms hosting content, products and platforms acting as intermediaries either between users or between users and sellers.

*As the text stands now, the DSA has fulfilled key promises of updating and reaffirming the key principles of the platform economy, such as maintaining the intermediary liability exemption and the country of origin principle.*

However, the DSA will also likely make it more difficult for startups to challenge their bigger competitors. New requirements for startups' services will include checking the identity and confirmation of their business traders, and setting up internal complaint mechanisms. The objective here is to ensure the safety of platforms' users. Startups share this intention, and therefore looking to minimise the unintended consequences for startups.

If done wrong, the DSA could result in startups having to design solutions that are neither fit nor cost-effective for their services. For example, the new legislation will force them to invest in expensive out-of-court dispute settlement bodies, which they will be charged for in case of litigation.

*The Digital Markets Act (DMA) will create a new category of platforms, called gatekeepers, that will prohibit certain practices, such as bundling data from core services, a ban on self-preferencing, or increasing interoperability between services.*

The goals and ambitions of the DMA have received support from startup communities across the EU.

Nevertheless, it will be important to factor in the direct and indirect impact of the DMA on startup ecosystems. First, the threshold sends a signal to entrepreneurs that they shouldn't grow beyond a certain size. Second, some of these practices, such as self-preferencing, are also used by startups, who will now need to assess the legal implications of the measures on their scaling prospects. Third, as startup ecosystems are interconnected with other economic players, it will be important to mitigate any negative impacts the DMA's might have on startups.

**Data regulation.** Recent years have seen a change in how the European Union regulates data. The former Commission created rules around privacy and the free flow of data, including distinctions on how personal and non-personal data should be processed.

*Recently, the European Commission proposed new legislation on data: the Data Governance Act (DGA) and the Data Act, creating new subcategories of data in the process.*

As a consequence, a new layer of requirements on how a startup can use, process and share these subcategories of data within and outside of the EU will enter into force in the coming months. This package of new laws will create legal uncertainty for startup entrepreneurs. It will not be clear from day one how to comply with rules, especially as most datasets can be a mix of personal, non-personal and sensitive data. The Commission also adds restrictions on how this data should flow outside of the EU, creating de facto new barriers to international data flows. These rules will affect startups acquiring, using or reselling data and the possibility for startups ecosystems to do business outside of the EU.

The **Data Governance Act** designs rules on how public authorities can share public sensitive data with businesses.

Although more data flows within the EU are always positive for startups, the regulation creates a new system of intermediaries. This means startups will need to invest time and human resources to be able to harness the opportunities of this new public data sharing. The DGA also restricts the possibility for public sensitive data to be transferred outside of the EU.

The **Data Act** was proposed by the Commission with the objective of allowing for more B2G, B2B and B2C data sharing.

*In practice, the Data Act will force any startup to share its data with the recipient of the data, other businesses and with governments for exceptional needs.*

Most of the time, it will be free of charge and the data in question should respect data protection rules, meaning that it can include sharing costs for startups. The Data Act also includes restrictions to international transfers of non personal data, thereby preventing startups' abilities to scale across the globe.
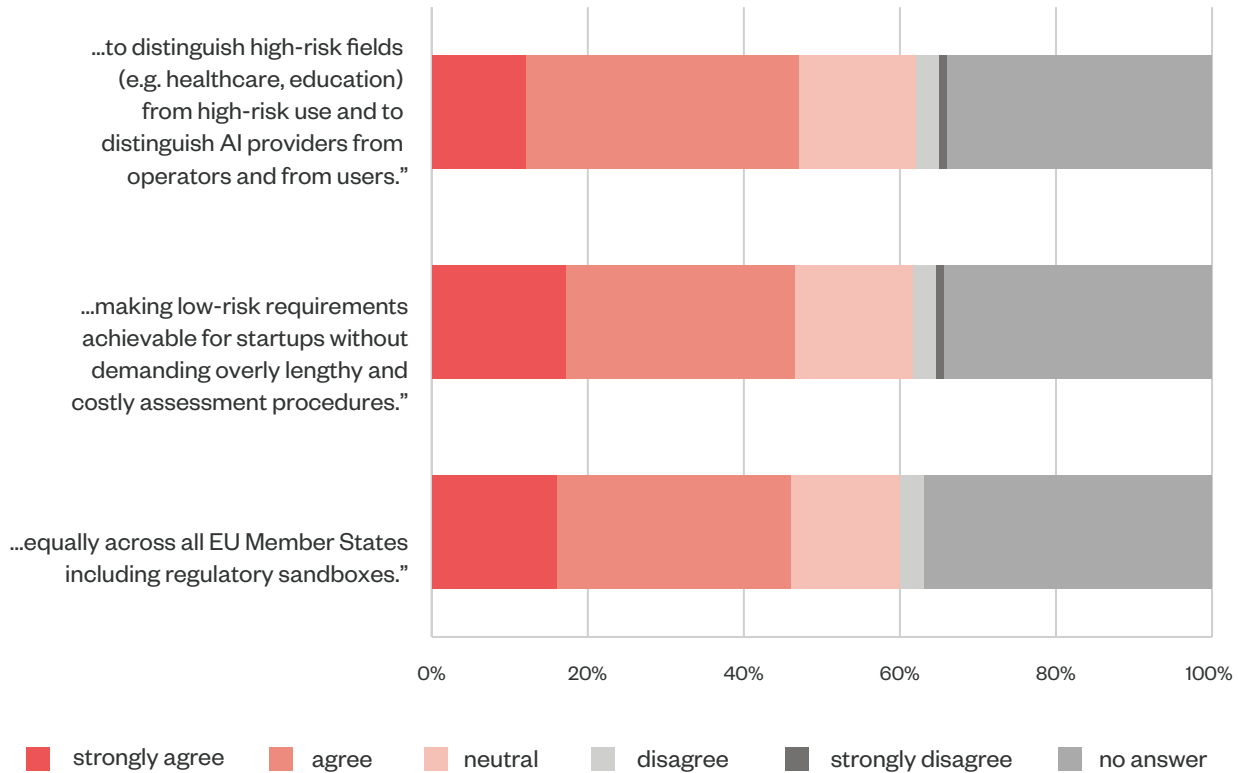
Startups share the intention of EU policy makers: making EU legislation fit for the digital economy. However, as a rule, new policy should aim to provide legal certainty and clarity rather than layers of complexity leading to new compliance costs.

# How AI should be regulated

**To what extent do you agree or disagree with the following statements?**
**"The use of Artificial Intelligence should be regulated...?**

*% of all respondents, n=212*

...to distinguish high-risk fields (e.g. healthcare, education) from high-risk use and to distinguish AI providers from operators and from users."

...making low-risk requirements achievable for startups without demanding overly lengthy and costly assessment procedures."

...equally across all EU Member States including regulatory sandboxes."

0%   20%   40%   60%   80%   100%

■ strongly agree   ■ agree   ■ neutral   ■ disagree   ■ strongly disagree   ■ no answer

# Methodology

This report is based on a survey conducted by Startup Hungary researchers between December 2020 and March 2021 and completed by 212 startup founders.

The survey method was designed by Dr. Agnieszka Skala, Associate Professor at Faculty of Management, Warsaw University of Technology. It has been applied by our partner organization, Startup Poland, for over 7 years to generate similar reports.

Defining the research sample:

There are numerous definitions of the term 'startup' floating around. This has not escaped our notice. Instead of adding yet another one, we have stood by last year's definition description as a criteria for defining potential survey respondents.

A respondent of Startup Hungary's survey has to be a company that:

1. **creates new technological solutions** OR

2. applies new technologies to **create products or services that can be attributed to one of the following areas:**

   A. IT / ICT
   B. energy technologies
   C. industrial technologies
   D. material technologies (including nanotechnology)
      e. biomedical technologies

OR

3. **has a scalable business model**

There was no limit on the number of years on the market that a given company needed to reach to respond. The scalability criteria also resulted in software agencies and similar companies being analyzed separately from other respondents. This additional data has allowed us to deduce conclusions on how startups and software agencies compare.

How the data was obtained:

Following a broad awareness campaign and individual invitations to local startup founders, 212 companies completed the questionnaire. It's vital to note that all participants completed the questionnaire on a voluntary basis, without any form of compensation.

How the data was analyzed:

The data set was cleared of companies that did not meet the initial criteria of a 'startup' and duplicated responses were deleted.

All differences in the number of respondents per question can be attributed to the logical path applied in the survey. Any missing responses were due to the fact that answers to some questions were not obligatory.

For the purpose of the report, two groups were distinguished:

**The champions** (27 companies) are startups that:
- earned over 80k EUR in average monthly revenue in the last 6 months, and
- have been growing 5% or more per month on average over the last 6 months, or
- raised funding from notable international investors

**The pretenders** (54 companies) are startups that:
- are over 3 years old (except non-software products (eg biotech), and
- have not yet achieved product-market fit, or
- have no regular revenue or an average monthly revenue under 10k EUR

# Partners

Research
Methodology

Analytics,
Research Partner

Exclusive Media
Partner

**STARTUP POLAND**

**bell**research

**Forbes**

Startup Hungary Partners:

Founding Partners

DESIGN TERMINAL

Google

iVSZ

Strategic Partners

Microsoft

PortfoLion
member of **otp** group

Supporters

citi

LEAD VENTURES

day1
day one capital

SEON

# Acknowledgements

Now in its second year, the Hungarian Startup Report is the most in-depth survey of the local startup ecosystem. It is the result of a united effort by the Startup Hungary team, its founders, board members, partners, and friends, as well as the network of local startups who took the time to complete the questionnaire. The creation and completion of the survey is a significant achievement towards creating a measurable benchmark for stakeholders to make better informed decisions around launching, growing, investing in, creating legislation for, and acquiring local startups.

In addition to the 12 founders and our founding partners who launched Startup Hungary in August 2020, new organizations have joined our movement since the beginning of 2021 to help us fuel the growth of the startup ecosystem.

Together, we have created tens of online events to educate and inspire local entrepreneurs, and committed to publishing this report annually in order to document data-backed trends as accurately as possible. The results provide a north star that shows us what ecosystem players need to focus on, how they should define their future activities, and where they can maximize their impact.

The project could not have been completed without the support of our founding partners, Google, Design Terminal, IVSZ and without our new strategic partners, Microsoft, PortfoLion and our supporters, Citi, Lead Ventures, Day One Capital, and SEON.

Last but not least, a big thank you goes out to all our other contributing partners, including Startup Poland, BellResearch, Reka Forgach (Smells Like Copy), and others.