Digital Serbia Initiative

STARTUP SCANNER 2025

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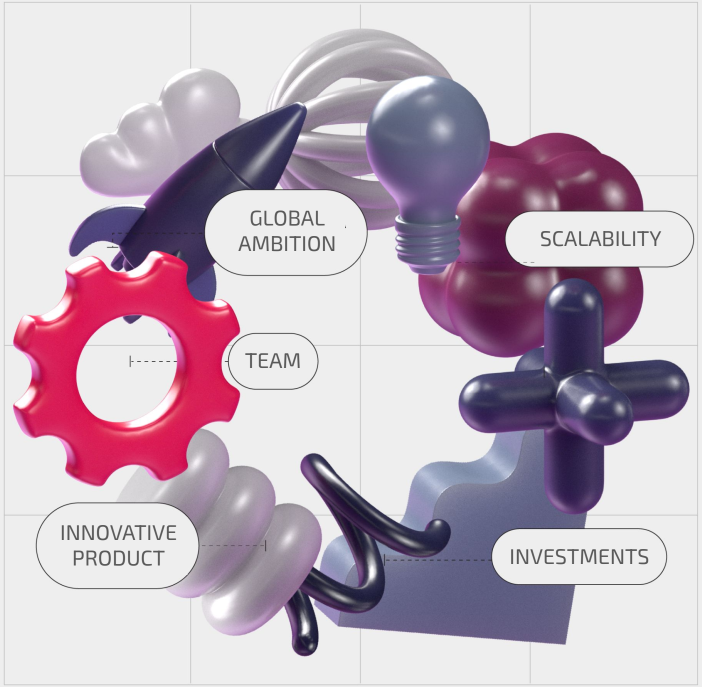
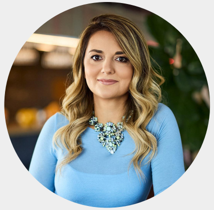
TABLE OF CONTENTS





Tanja Kuzman

CEO, Digital Serbia Initiative

RESULTS OVERVIEW

This year's Startup Scanner marks the fifth annual overview of the development level of Serbia's startup ecosystem. The goal is to provide both local and international stakeholders with a better understanding of the ecosystem's maturity and the types of support startups will need in the coming period.

Compared to previous years, we have made an effort to highlight key factors that may significantly influence the future of the ecosystem. In line with this, the 2024 edition introduces an additional layer of analysis by applying the definition of a startup used by VC investors — startups are innovative ventures with the potential for scalable growth in global markets.

The results show a decline in the number of early-stage startups and a slight increase in those at the growth stage. The main challenge is still related to raising Series A and Series B, primarily due to the failure to meet expected MRR (monthly recurring revenue) growth rates, required by investors.

It's encouraging to note that startups founded after 2022 demonstrate slightly stronger global ambition, although the overall lack of such ambition remains one of the challenges for further ecosystem development. The correlation between revenue/profit, and the presence of team members with sales and marketing expertise, is often overlooked by startups with very low MRR, indicating a limited understanding of how global scalability is actually achieved.

There is no doubt that Serbia's startup ecosystem has experienced accelerated growth in recent years, with various incentive measures introduced and some previously identified challenges addressed. At the same time, there appears to be a lack of consistent exposure to market pressures related to expected growth, the creation of a grant dependency trap and grantapreneurs, insufficient advancement of founders' global ambition, and the use of a startup definition that is not aligned with globally accepted standards.

The analysis points to the need for greater consensus among support organizations regarding how they approach startup development, as well as for enhanced support mechanisms to help startups transition into later stages of growth. It also highlights the need to create new, market-driven financial instruments. This report will serve as a foundation for developing recommendations to support the further evolution of the Serbian startup ecosystem.

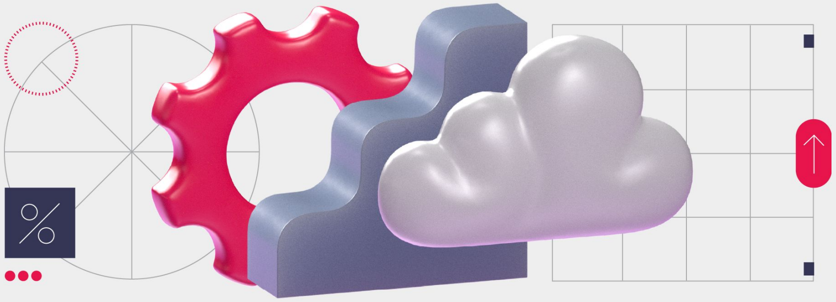
We hope that — together with all our partners, to whom we are grateful for their support of this research — we can help improve the conditions for startup development and address the current challenges, with the ultimate goal of accelerating the growth of the ecosystem.

KEY INSIGHTS

An analysis of revenue growth and global market presence indicates a gradual decline in the number of startups within the ecosystem, as well as persistent challenges related to business scalability. Although a significant number of startups are created each year, data shows that many of them fail to sustain continuous growth. This trend is particularly evident among startups that have not achieved MRR growth and those not targeting international markets, despite being in the ecosystem for more than four years.

At the same time, there is a noticeable decline in the number of startups progressing into later development stages. While the number of startups raising Series A and B has slightly increased compared to 2023, significant part of the ecosystem remains in the MVP and product–market fit phase — often for much longer than is typical in developed ecosystems. Startups without a validated business model, rapid MRR growth, and international presence are not perceived as attractive to investors, resulting in a lower number of externally funded startups compared to previous years.

Startups that have developed products for the global market, from the outset, show greater potential for rapid growth, scaling, and attracting investment. On the other hand, relying on grants can be useful during the early stages of startup development. However, in the long run, data suggests that grants tend to slow down growth and reduce market potential by creating a safety net. To attract investment from VC funds, it is crucial to demonstrate high MRR and a clearly defined scaling plan. Such practices are more often observed among startups established in the past three years.



Startup profile

The average age of startup founders in Serbia is 36.5 years.

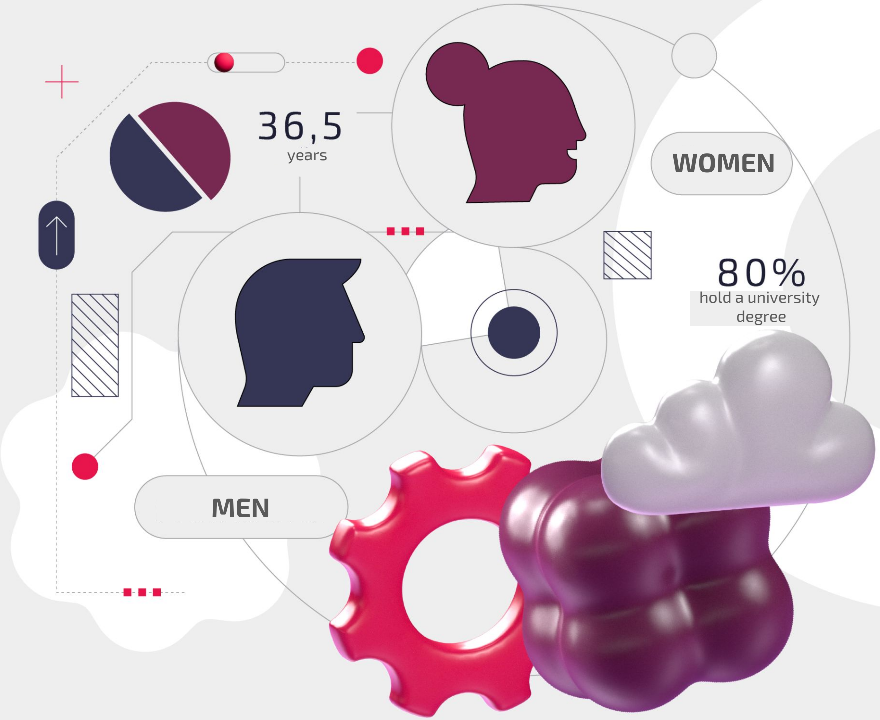
80% of startup founders hold a university degree, while 77% gained key knowledge for founding and running a startup through prior work experience.

Returnees from abroad make up 22% of founders, marking a 5% increase compared to 2023.

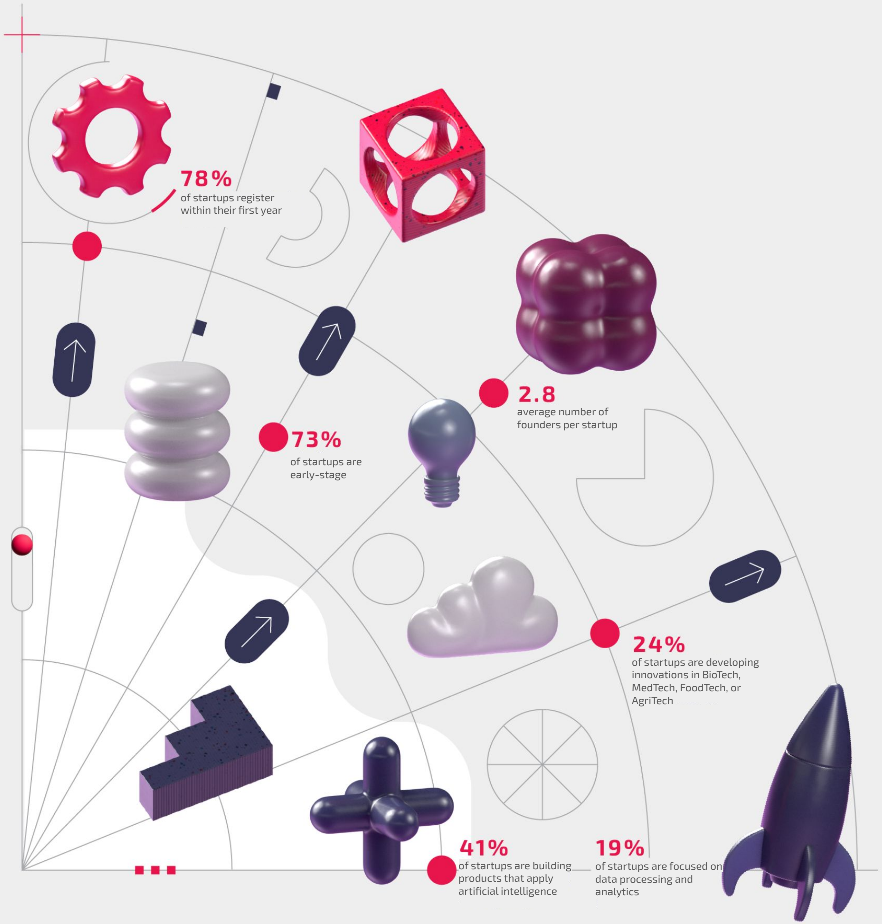
A quarter of founders are serial entrepreneurs, while 27% previously worked in other startups.

The number of founders with expertise in marketing (36.3%) and sales (33.1%) has increased — both by 6% compared to 2023.

Two-thirds of startup teams consist exclusively of male founders (65.2%), while 26.3% of startups have only one woman on the founding team.



KEY INSIGHTS



Startup profile

The majority of startups (78%) are registered within one year after the initial team gathered around the idea.

A large number of startups remain in the early stages of development (73%), while the share of those raising Series A or B funding has marginally increased to 6.5%.

The average number of founders per startup is 2.8, with as many as 62% of founding teams consisting of two or three members.

24% of startups that participated in the survey are developing innovations in BioTech, MedTech, FoodTech, or AgriTech.

41% of startups are developing products that apply AI, while 19% are focused on data processing and analytics.

Business strategies

01 The majority of startups (67%) are still not profitable, with 68% of them operating for under three years. Among those operating for more than three years, 6.6% have not yet launched a product, and 33% generate annual revenue of less than one million EUR.

02 Nearly half of startups (45%) still do not generate monthly recurring revenue (MRR), while 29% report MRR growth of up to 10%. Among them, 55% have been operating for more than three years without expanding to international markets.

03 12% of startups report MRR growth of over 10% with 83% of them raising investments.

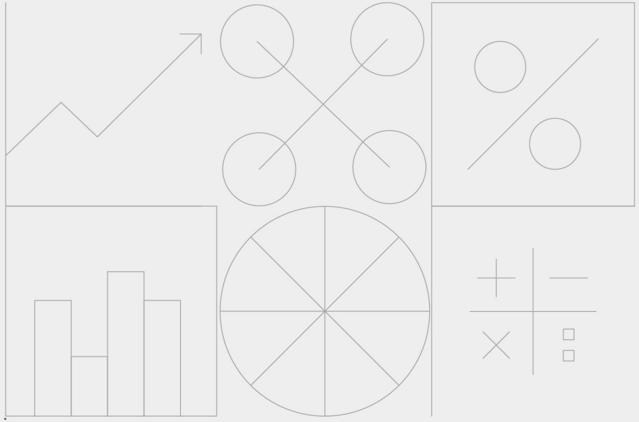
04 Startups with higher MRR growth are more likely to develop products for the global market and to begin international sales early (62%).

05 The presence of Serbian startups in the European and USf markets has increased by 6% compared to 2023.

06 Startups with higher MRR growth are more likely to hire new employees. 29% of those with MRR growth over 10% have expanded their teams by more than three people. In contrast, that percentage is 15% lower among startups with slower growth, and 96.6% of startups without monthly revenue have not increased their team size.

KEY INSIGHTS

Funding and support for startups



1

Startups with a high MRR growth rate are less likely to plan for funding through grants (25%) or incubator/accelerator programs (12%). Contrary to that, startups with lower MRR growth (56%) or no MRR growth at all (69%) are more likely to consider grants as a primary source of funding in 2025.

2

Grants and other non-repayable funds are used by 64% of startups, marking an 8% increase compared to 2023.

3

Less than a third of startups (27.8%) have secured external investment, representing a 17% decrease compared to 2023.

4

The vast majority of domestic startups (79.8%) participate in startup support programs.

5

Among startups without monthly revenue, 69% plan to rely on grants in 2025. 70% of startups with MRR growth of up to 10% plan to finance their operations through their own resources, while 67% of startups with MRR growth above 10% want to obtain a VC investment.

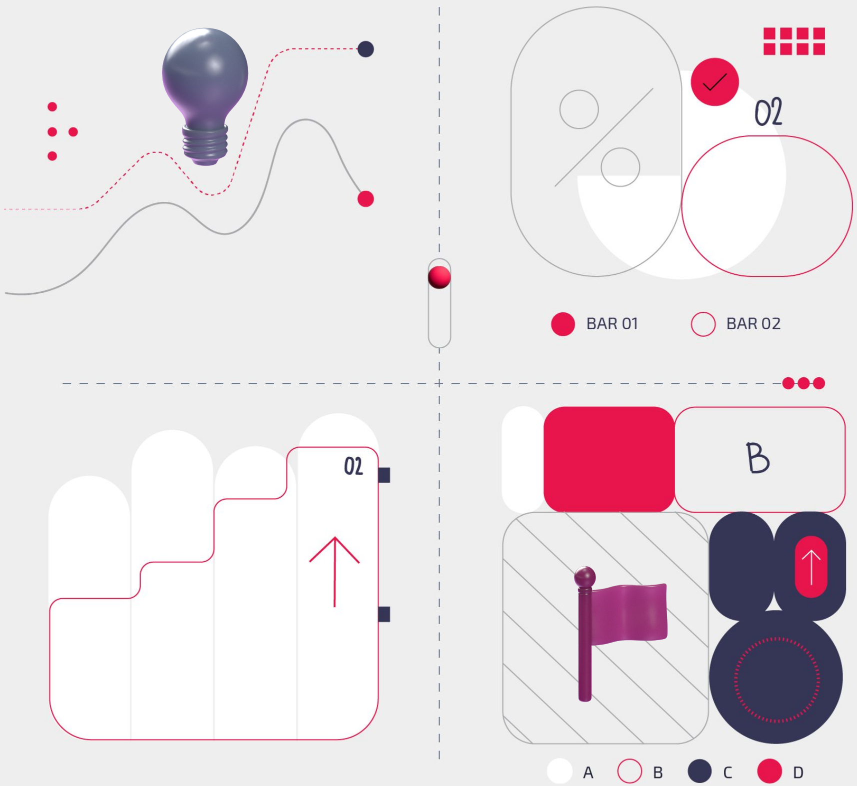
STARTUP **SCANNER 2025**

METHODOLOGY

How did we conduct the research?

Startup Scanner 2025 is a report based on research modeled after relevant international studies[1].

The research relies on primary data. An online questionnaire was used to collect responses directly from startup founders. After data collection, the responses were processed and analyzed using descriptive statistical methods. The online survey was conducted between November and December 2024, and the results presented in Startup Scanner 2025 refer to developments during 2024.



[1] EU Startup Monitor / Austrian Startup Monitor

Startup profile

We encountered several challenges when determining the sample for this research. Defining the total number of startups within an ecosystem is inherently difficult due to the dynamic nature of startup creation, development, and closure. Additionally, the number of startups identified within an ecosystem is influenced by the specific definition of a startup being applied.

WHAT IS A STARTUP?

A startup is a newly established, innovative business entity with the potential for rapid and substantial growth. It demonstrates the capacity to develop — in the foreseeable future — a product, service, or process that is new or significantly improved compared to the best currently available solution in its industry, while also carrying a risk of technological or market failure.

According to the Startup Genome research conducted in Serbia in 2019, the number of startups in the local ecosystem was between 200 and 400 startups. As part of its ecosystem mapping efforts, the Digital Serbia Initiative recorded slightly over 500 active startups in its database as of December 2024 — based on the previously stated definition — that were active between 2022 and 2024.

Since this database is not considered final, and under the assumption that it represents approximately 80% of the actual number of startups, it is estimated that the number of startups in the Serbian ecosystem is around 600 startups at the end of 2024. Furthermore, if the definition of a startup is narrowed to include specific parameters related to scalability within a defined timeframe and presence in global markets, the number of startups in the ecosystem would be significantly lower.

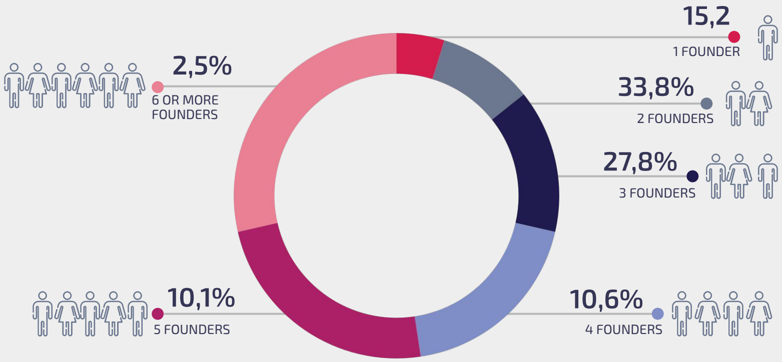
The questionnaire was distributed to all startups listed in the DSI startup database, as well as to support organizations and programs, relevant institutions, the research community, and domain experts, who were encouraged to forward it to startups involved in their programs or networks. As a result of these efforts, a total of 198 startups completed the questionnaire, representing 33% of the estimated number of startups in Serbia. Considering all of the above, the findings presented in the Startup Scanner 2025 report should not be viewed as absolute figures, but rather as indicators of the key trends within the startup ecosystem.

Startup Ecosystem in Serbia

STARTUP PROFILE

FOUNDING TEAM STRUCTURE

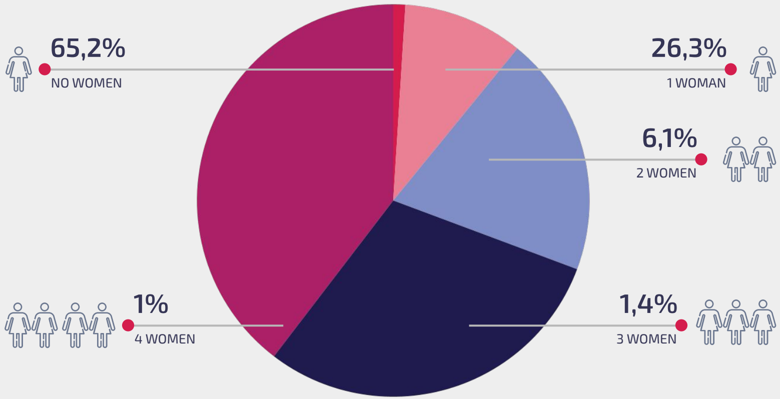
Contrary to the common stereotype of a successful entrepreneur independently developing an innovative idea and achieving great success, data collected during this and the previous three years consistently confirms that founding a startup is most often a team effort — in as many as 85% of cases. The average number of founders per startup is 2.8, with 61.6% of founding teams consisting of two or three members, which aligns with best practices. Investors tend to favor such teams, as they bring together diverse knowledge and skills. Additionally, having more than one founder ensures business continuity in case one of the founders steps away from the venture. Another positive signal for investors is an odd number of co-founders, which facilitates faster decision-making. On the other hand, startups with a single founder — which account for 15.2% in our research — carry a higher level of risk, as their survival depends entirely on one individual.



NUMBER OF FOUNDERS

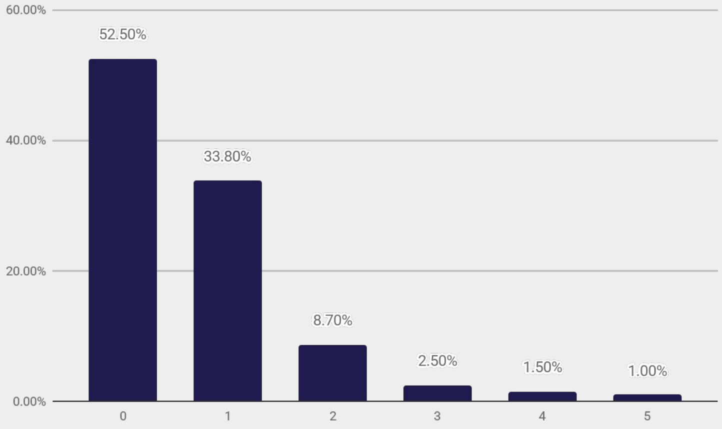
N= 198

An analysis of the gender composition of founding teams confirmed a trend observed in other studies — two-thirds of teams consist exclusively of male founders (65.2%), while 26.3% of startups have only one woman as a founder. This result aligns with findings from Empowering Europe's research, which shows that 25% of startups from Central and Eastern Europe have at least one woman among founders.



WOMEN IN FOUNDING TEAM

N= 198



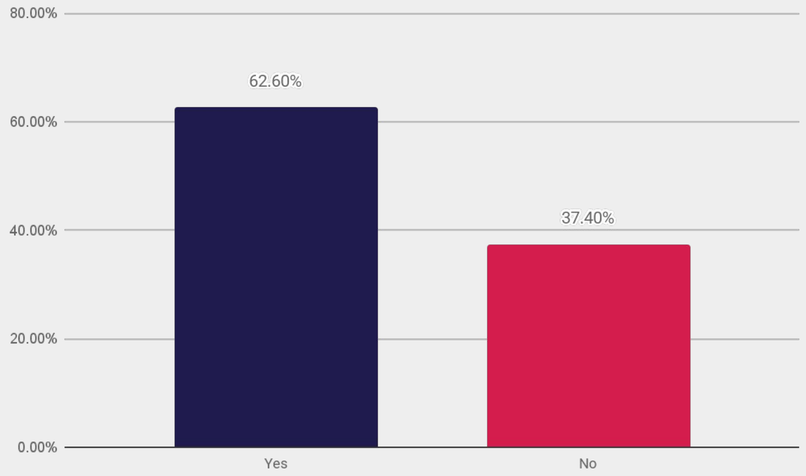
N= 198

WOMEN IN MANAGEMENT

An analysis of startup management team composition in Serbia reveals a significant gender imbalance, which has worsened in 2024. The number of startups with all-male management teams has increased considerably — from 37.8% in 2023 to 52.5% in 2024. In addition to more than half of startups having no women in their management teams, the share of startups with only one woman in management has decreased by 15.5%. The average number of men in managerial roles per startup is 2.18, while the average number of women is 0.72. A particularly noteworthy insight: within the sample of 198 startups, out of a total of 2,342 founders and employees, one-quarter (24.6%) hold C-level positions (CEO, CTO, COO, CMO, etc.) or other roles involving strategic decision-making.

For a long time, startup founders in the ecosystem were predominantly engineers, programmers, or experts from technical fields. However, due to the growing need for diverse knowledge, skills, and expertise — along with shifts in industry structures and the global importance of certain domains — this trend has changed. Research findings show that nearly two-thirds (62.6%) of startups have non-technical founders on their founding teams, coming from fields such as marketing, finance, social sciences, or the creative industries.

Are there non-technical founders in the founding team?

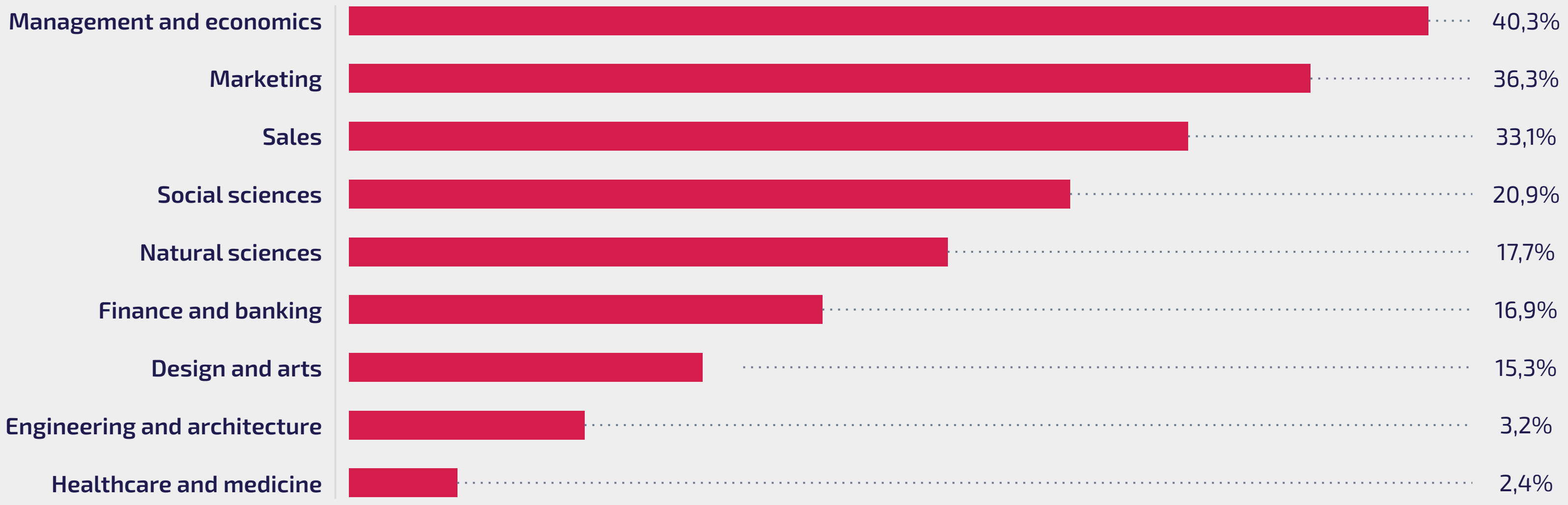


COMPOSITION OF FOUNDING TEAM BY TECH AND NON-TECH BACKGROUND

N= 198

An analysis of the professional backgrounds of non-technical startup founders shows that the largest share (40.3%) comes from the fields of management and economics — representing a decrease of 8.8% compared to 2023. When comparing previous years, we observe a consistent increase in the share of founders with expertise in marketing (from 17.2% in 2021 to 36.3% in 2024) and sales (from 16.6% in 2021 to 33.1% in 2024).

This rise in founders with relevant knowledge in sales and marketing aligns with a stronger reliance on founder capabilities and the growing prevalence of founder-led sales. Moreover, this trend may reflect a broader recognition of the importance of these skills and expertise for founding teams aiming to build globally successful startups.



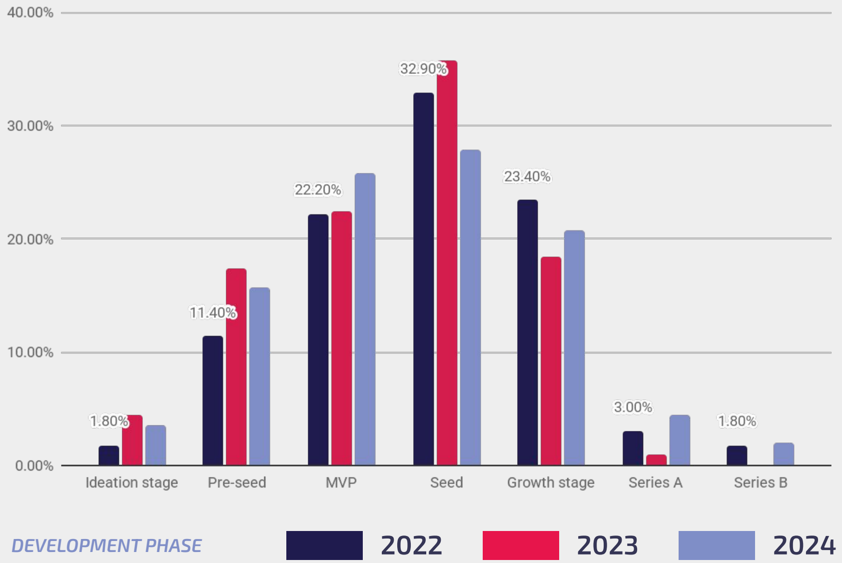
NON-TECH FOUNDERS' EXPERTISE

N = 124; Respondents were allowed to select multiple answers

DEVELOPMENT PHASE

Year over year, there are changes in the number of startups at different phases of development. This year, we observe a slight decrease in the number of startups in the ideation phase (3.5%) and the pre-seed phase (15.7%) compared to 2023. At the same time, the number of startups with minimum viable product (MVP) has a modest increase — from 22.4% in 2023 to 25.8% in 2024. The most significant change is observed in the seed stage, where the share of startups has dropped from 35.8% in 2023 to 27.8% in 2024. The number of startups in the growth phase has increased from 18.4% to 20.7%, while the share of startups in Series A has risen from 1% to 4.5%. Startups in Series B are now present with 2%.

These shifts in the number of startups across different development stages point to challenges in the startup funnel. The data indicates a contraction of the startup ecosystem and insufficient number of startups successfully advancing from one stage to the other. This issue will be explored in greater detail in the following sections of the report.

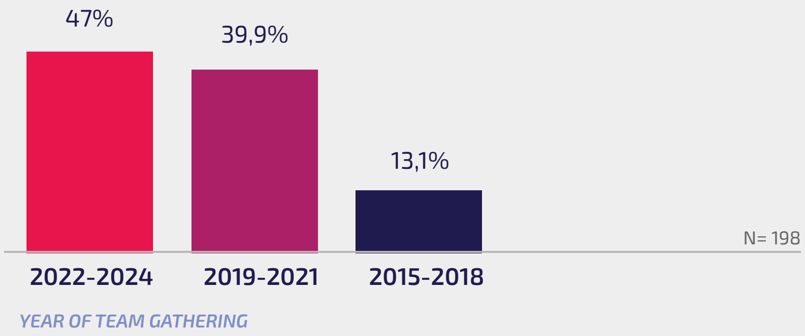


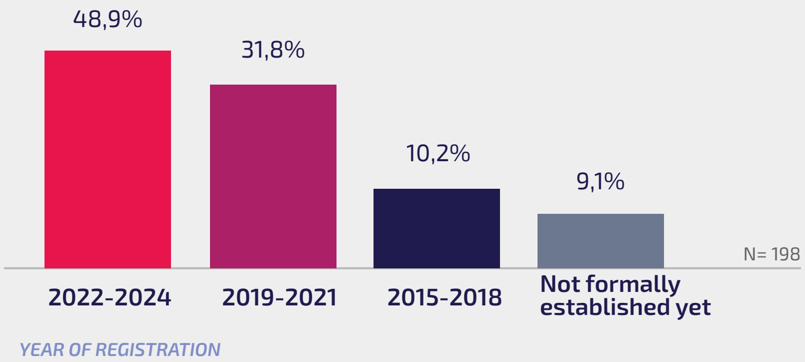
TEAM FORMATION

Research findings show that 47% of startups formed their teams and began operations during the past three years (2022–2024). When compared to previous years, we can observe that the rate of new startup formation has slowed relative to the overall size of the ecosystem. This is most clearly seen when comparing the share of teams younger than three years: 68% in 2021, 56% in both 2022 and 2023, and 47% in 2024.

An analysis of the time between team formation and startup registration shows that most startups (78.3%) are officially registered within one year after the initial team is formed, while a smaller share takes longer than two years. Global trends suggest that startups are typically registered within the first year to accelerate their development, enable fundraising, and avoid falling behind competitors with similar ideas. Our analysis also reveals that some startups founded between 2015 and 2021 are still without a developed MVP (5.6%) — indicating that their development does not align with the pace typically expected of startups.

This year's data also shows a significant drop in the share of startup teams that are not formally registered — from 18.4% in 2023 to 9.1% in 2024.

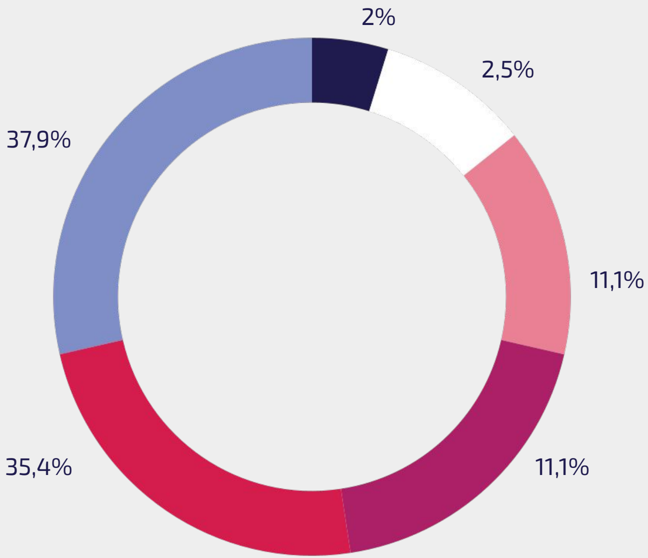




FOUNDING IDEA

The founding of a startup typically begins with the development of an innovative idea that serves as the foundation for creating a new product or service aimed at solving a specific problem or seizing a market opportunity. While an innovative idea can be the trigger for a successful startup, it is not sufficient on its own — global ambition and scalability are essential. If the idea addresses a problem that exists only locally, it likely lacks the potential to grow in global markets, which limits its ability to attract investment and scale its user base. Founders must think about international markets from the very beginning and adapt their ideas accordingly. With the right mindset, a capable team, and appropriate financial resources, the chances of success increase significantly.

Our research shows that 37.9% of teams developed their idea independently of their job or formal education, while 35.4% arrived at their idea through professional experience within companies. Formal education and work in academic or research institutions served as the source of inspiration for 22.2% of startups. Although the share of startups originating from academia in Serbia remains low compared to developed innovation ecosystems, the data shows and increase — from 1.6% to 3.3%.



FOUNDING IDEA

N= 198

- Hackathon or support program
- Pivot from a previous idea
- Employment at a university or other research institution
- Studies at a university or other form of formal education
- Employment in a company
- Independently from work/formal education

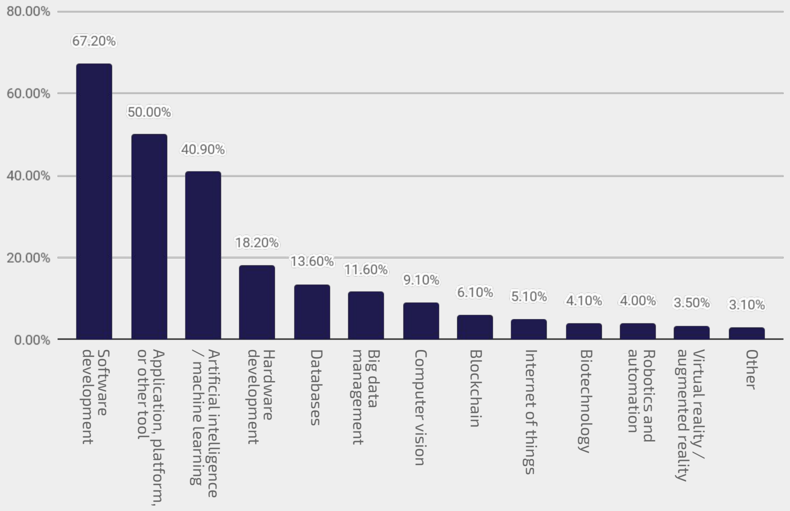
SECTORS

The largest share of startups that participated in the survey comes from the BioTech/MedTech sector, accounting for 16.2% — a slight increase compared to 2023 (11.9%). AgriTech and FoodTech also stand out as highly represented sectors, with 12.1% of startups operating in this area, highlighting the potential for innovation in agriculture and food technology — both traditionally strong industries in Serbia.

BioTech / MedTech **16,2%**	AgriTech / FoodTech **12,1%**	Civil engineering / Energy **8,1%**	Gaming **7,6%**	eCommerce **7,1%**	Construction / Real estate **7,1%**	Education **6,6%**
FinTech **6,6%**	Human resources **6,6%**	Media and entertainment **6,6%**	Marketing / Design **5,6%**	Logistics and transportation **5,1%**	Sport **4,5%**	LegalTech **4,5%**
Social and public services **4,5%**	Cyber security **3,5%**	Smart cities **2,5%**	Hospitality and travel **2%**	Event industry **1,5%**	Telco **1,5%**	Other **5%**

INDUSTRY IN WHICH THE STARTUP OPERATES

In addition to the expected focus on software and application development, we are observing an increase in the use of AI technologies — with a 14.2% rise compared to 2022. Artificial intelligence, databases, and big data management have emerged as key drivers of innovation within the ecosystem, reflecting global trends and the notion that *Data is the New Oil*. According to *Crunchbase* data, investments in AI companies in 2024 grew by more than 80% compared to the previous year, confirming that AI is increasingly recognized as a technology with high scaling potential. Interest in hardware development also remains notable (18.2%), although slightly lower than in 2023, when it stood at 21.9%.



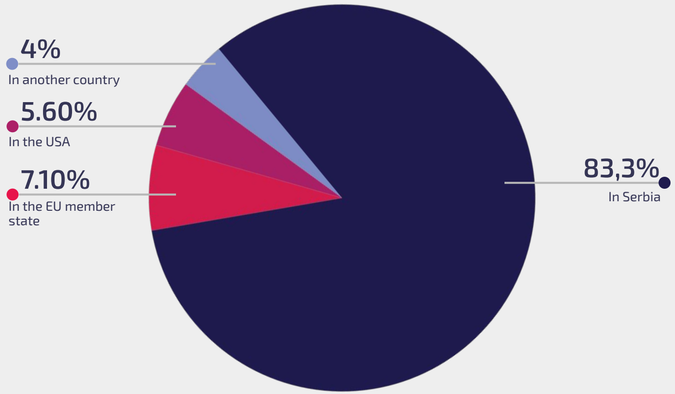
TECHNOLOGICAL FOCUS AREA OF THE STARTUP

N = 198; Respondents were allowed to select multiple answers

LOCATION

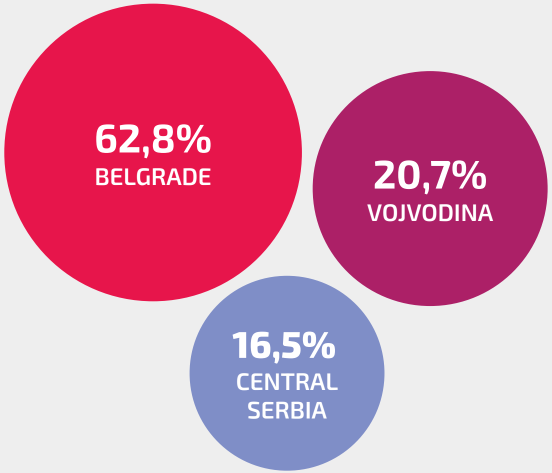
The majority of startups choose to have their headquarters in Serbia (83.3%). All startups headquartered in EU member states (7.1%) or the US (5.6%) are teams that have been operating for several years, while all startups founded less than a year ago are registered exclusively in Serbia. It can be assumed that decisions to relocate headquarters outside of Serbia are driven by factors such as specific investor requirements, easier access to customers, or more streamlined and efficient administrative processes.

An analysis of the geographic distribution of startup headquarters across regions and cities in Serbia shows an even greater concentration in the City of Belgrade — rising to 62.8% compared to 57.9% in 2023. This reflects Belgrade's role as the country's business and technology hub, offering the most developed infrastructure and the greatest access to resources.



N= 198

STARTUP HEADQUARTERS



REGION OF STARTUP HEADQUARTERS

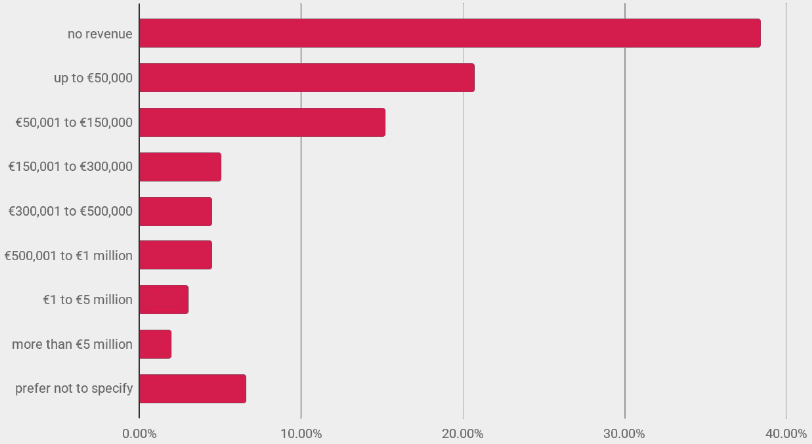
N= 164

BUSINESS STRATEGIES

BUSINESS PERFORMANCE

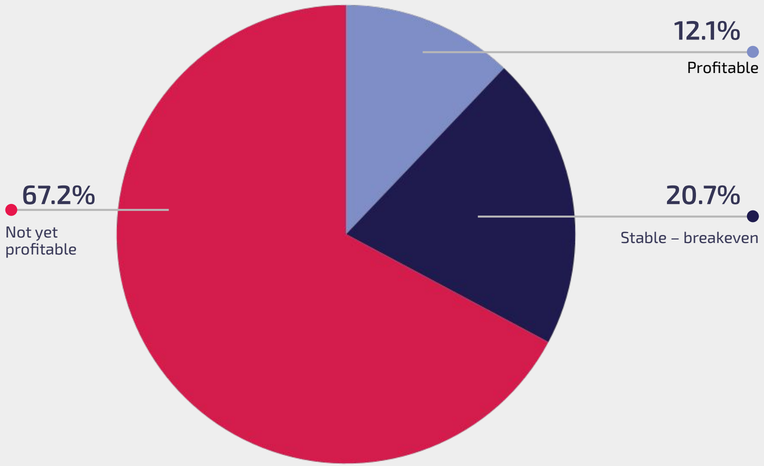
A large percentage of startups face challenges in generating revenue and achieving profitability. In 2024, 38.4% of startups operated without any revenue. Among those that did generate revenue, 35.9% reported annual earnings of up to €150,000. The share of startups earning between €500,000 and €1 million annually increased by 1%, while the share of those with revenue exceeding €1 million rose by 1.5% compared to 2023.

Of particular concern is the fact that among startups older than three years, 6.6% still have no product on the market, while 32.8% generate less than €1 million in annual revenue. These startups appear to be evolving into innovative SMEs that lack the scalability and growth rates typically expected of startups. For such companies, it is crucial to focus on increasing revenue and strengthening their presence in the local market, rather than pursuing investment from VC funds since they do not meet the criteria typically required by such investors.



REVENUE IN THE PREVIOUS FISCAL YEAR N= 198

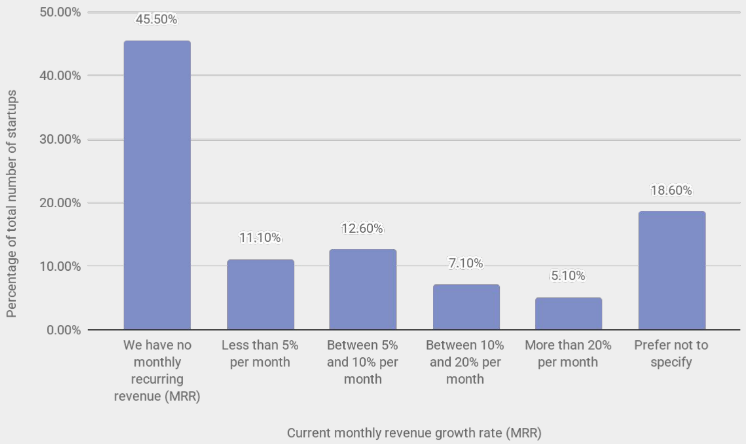
When it comes to profitability, 67.2% of startups in Serbia are still operating without profit. On the other hand, the share of startups that reported a profit this year stands at 12.1%, nearly identical to the 12.4% recorded in 2023. While some startups are showing progress, a lack of knowledge and expertise within the ecosystem — combined with an unfavorable economic climate and other scaling challenges — continues to pose a significant barrier to achieving sustainable growth and financial stability for the majority.



STARTUP PROFITABILITY

N= 198

The trends observed in the previous sections on business performance and sales are clearly reflected in the analysis of MRR growth. Data shows that a significant portion of startups (45%) still do not generate recurring revenue — a characteristic typical for startups in early stages of development. Startups with minimal MRR growth of up to 5% make up 11.1% of the sample, while 12.6% report growth between 5% and 10%. Startups achieving more substantial growth — between 10% and 20% — account for 7.1%, while 5.1% report MRR growth exceeding 20%.



N= 198

MONTHLY REVENUE GROWTH RATE (MRR)

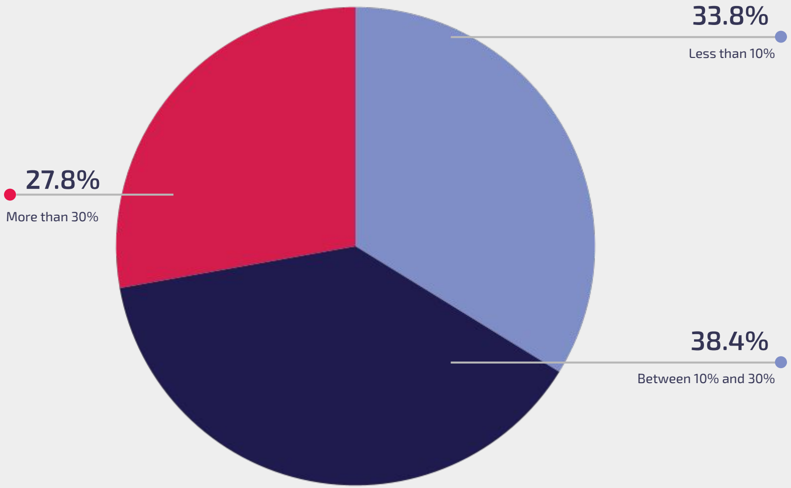
For further analysis we decided to group startups into three categories: those without MRR, those with MRR growth below 10%, and those with monthly growth above 10%. In absolute numbers, only 24 out of the 198 surveyed startups reported MRR growth above 10%. Considering the period of startups' existence and their presence — or lack thereof — in global markets, these MRR growth rates suggest an increasing number of startups transitioning into innovative SMEs.

Further analysis reveals a strong correlation between MRR growth and the ability to attract external investment. Among startups with no revenue growth, 84% failed to secure any external funding. This indicates that the value and speed of MRR growth contributes significantly to startups' attractiveness for investors. As many as 83% of startups that have raised investment are those with high MRR growth. Only 3.3% of investors proactively reached out to and invested in startups without MRR, while this number rises to 25% among startups with high MRR growth.

Startups with high MRR growth are less likely to rely on grants (25%) or incubator and accelerator programs (12.5%), whereas those with low (56%) or no MRR growth (69%) are more likely to view grants as their primary funding source in 2025. This highlights a clear difference in funding strategies between early-stage startups with no or very low revenue, and those that are experiencing significant revenue growth.

When it comes to internationalization, startups with higher MRR growth are more likely to report that they have been developing products for global markets from the outset and have already begun international sales (62%). This further confirms that MRR growth is not just an indicator of current success, but also a key signal of a startup's ability to position globally.

According to startups' self-assessments, projected MRR growth rates for 2025 show that one-third (33.8%) expect slower growth — below 10% per month. Slightly more than a third (38.4%) expect significant growth in the range of 10% to 30% per month, while 27.8% anticipate MRR growth exceeding 30% on a monthly basis. Among those forecasting the fastest growth, 67.3% are developing software-based solutions, and more than half (56.4%) have been operating for less than four years. Considering that only 24 out of 198 startups in the sample currently report MRR growth above 10%, the plans of 131 startups to reach similar or higher growth in 2025 appear optimistic. Actual results may prove to be more modest due to external market factors and the fact that founders often hold positive expectations that do not fully materialize in reality.

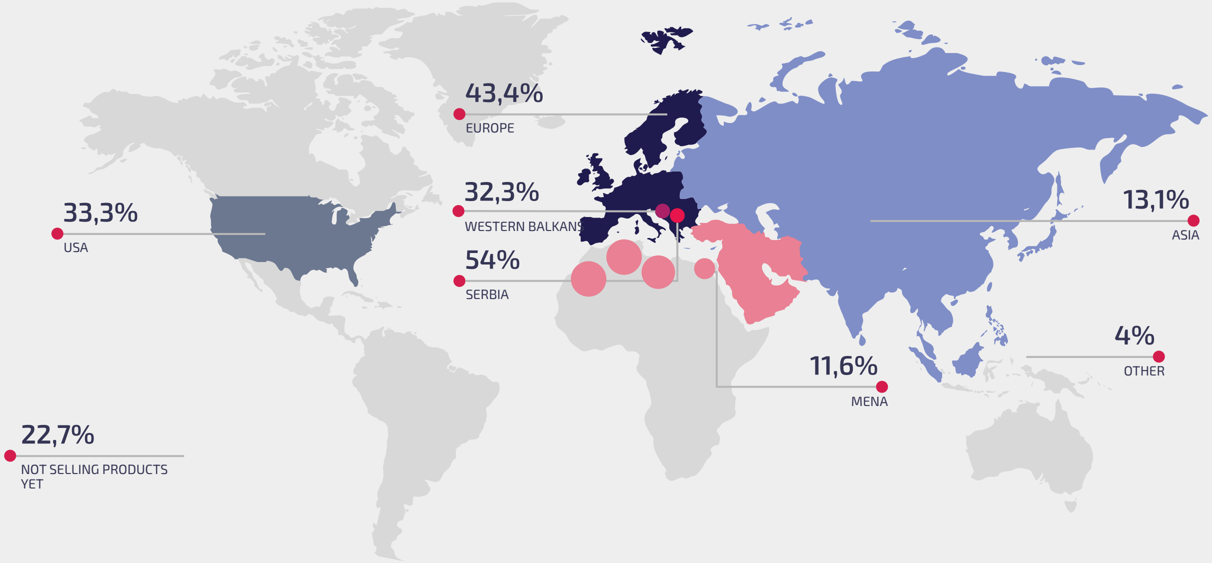


ESTIMATED MRR GROWTH RATE IN 2025

N= 198

TARGET MARKETS

More than half of startups (54%) operate in the domestic market, while one-third (32.3%) are active in Western Balkan countries. Compared to last year's data, there has been an increase in the presence and business activity of Serbian startups across all foreign markets — with particularly notable growth in Europe (43.4%), the United States (33.3%), Asia (13.1%), and the MENA region (11.6%). It is also important to highlight that the number of startups that have not yet launched their product has decreased by 6.7% compared to 2023.

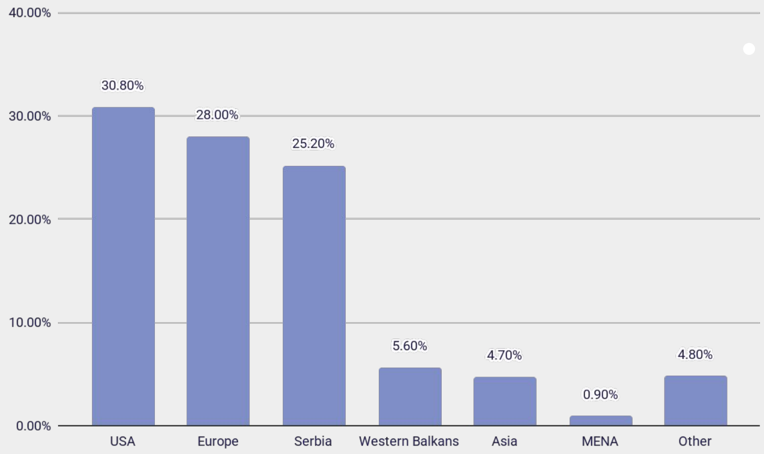


TARGET MARKETS

N = 198; Respondents were allowed to select multiple answers

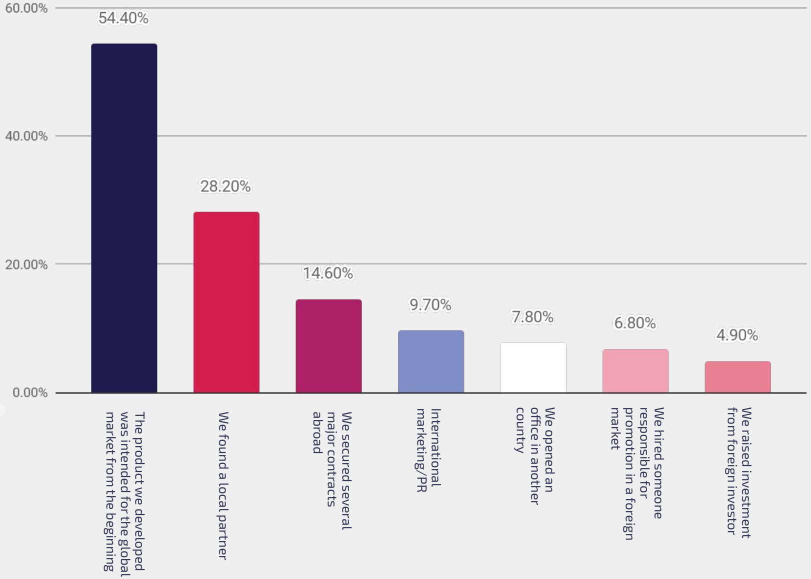
When looking at the primary markets of startups operating outside Serbia and the Western Balkans region, the most common markets are the United States (30.8%) and Europe (28%), driven by greater opportunities for growth and business expansion. However, more than 30% of globally active startups still primarily focus on Serbian and Western Balkan markets.

When these results are applied to the full sample, we see that 16.7% of startups primarily launch their products in the US market, and 15.2% target European markets. It is evident that only a relatively small segment of the ecosystem has truly global aspirations, highlighting the need for additional support aimed at helping startups grow and internationalize.



N= 198

MAIN TARGET MARKETS



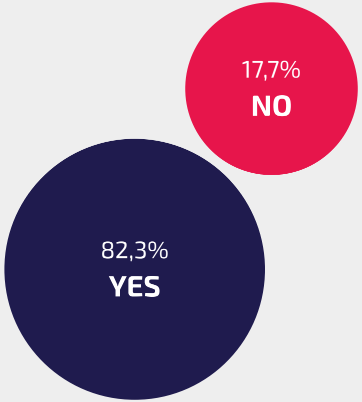
N= 103

ASSISTANCE WHEN ENTERING THE INTERNATIONAL MARKET

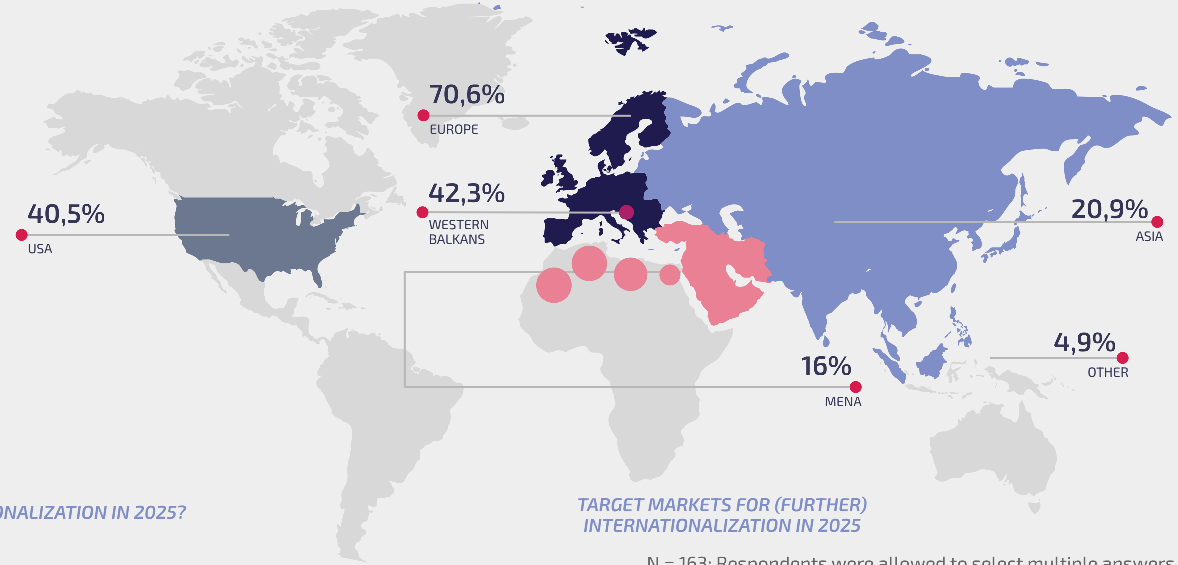
The data highlights several key factors that have contributed to the successful international expansion of Serbian startups. Among startups operating outside of Serbia and the Western Balkans, the majority (54.4%) had been developing products for global markets from the very beginning — demonstrating that vision and global ambition are critical. The second most common factor is the establishment of partnerships and contracts in foreign markets (42.8%), which have helped facilitate market entry. Another contributing factor, cited by 7.8% of startups, is opening a physical office abroad.

The vast majority of startups (82.3%) are planning to internationalize in 2025. When examining their target markets for the next 12 months, Europe stands out as the primary focus for 70.6% of startups planning international expansion — a result that may be unexpected, given the region's geographic and cultural proximity. The Western Balkans has been identified as a target market for further internationalization in 2025 by 42.3% of startups, with 6.1% planning to expand exclusively within this region.

Further analysis of development stages and years in operation reveals that these startups have been operating for over four years, indicating that they no longer pursue global growth and are evolving into innovative SMEs. In contrast, newly established startups tend to focus more on international markets and expansion beyond the region from the outset. A total of 40.5% of startups plan to expand to the US market — a 3.7% increase compared to 2023. Additionally, 20.9% of startups are targeting expansion into Asia, while 16% have identified the MENA region as a priority market.



N= 198 *DOES YOUR STARTUP PLAN (FURTHER) INTERNATIONALIZATION IN 2025?*



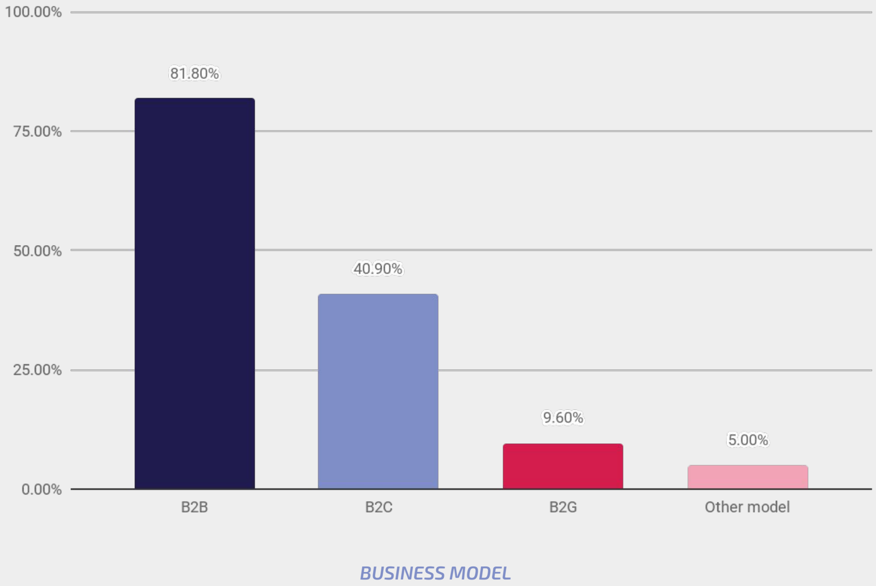
TARGET MARKETS FOR (FURTHER) INTERNATIONALIZATION IN 2025

N = 163; Respondents were allowed to select multiple answers

BUSINESS MODEL

An analysis of startup business models in Serbia shows that the majority operate under a B2B (business-to-business) model, with a share of 81.8%. There has been a decline in the B2C (business-to-consumer) segment — from 50.2% in 2023 to 40.9% in 2024. Meanwhile, 9.6% of startups operate under a B2G (business-to-government) model this year. Considering that most founders have prior experience in the private sector, the data suggests that many leverage their professional background and networks to test MVPs and enter the market more easily through partnerships with companies.

However, despite the high prevalence of the B2B model, it is important to note that securing business contracts with companies can take between three and twelve months. This slows down growth and makes it more difficult to attract investment. VC funds rarely invest in startups that are unable to scale sales quickly. Therefore, startups relying on the B2B model must pay close attention from the outset to compliance with top-tier technical, security, and industry standards — in order to increase enterprise readiness to adopt their product or service in the short term.



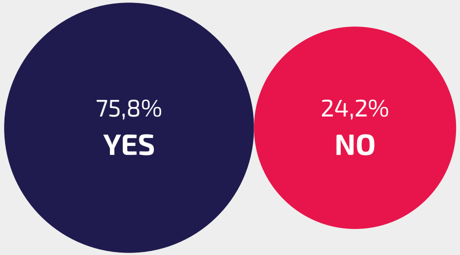
N = 198; Respondents were allowed to select multiple answers

BUSINESS STRATEGIES

INTELLECTUAL PROPERTY PROTECTION

The innovative ideas and solutions developed by startups often require protection through appropriate legal mechanisms in the field of intellectual property. Our research shows that 75.8% of startups are developing intellectual property. A comparison with previous years indicates a slight increase in the number of startups that have taken steps to protect their intellectual property — from 48.3% in 2021 to 52% in 2024.

Does the startup develop intellectual property[2]?



INTELLECTUAL PROPERTY DEVELOPMENT

N= 198

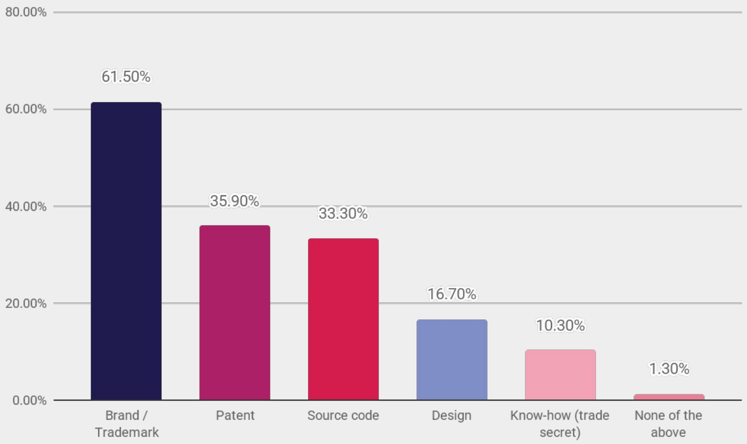
Has the startup protected any intellectual property rights?

INTELLECTUAL PROPERTY PROTECTION

N= 150

[2] In this study, intellectual property refers to: brand/trademark, patent, source code, design, and know-how.

The majority of startups choose to protect their brand or trademark (61.5%), a share that has significantly increased over the years — from 26.5% in 2021 to 61.5% in 2024. Patent protection is used by 35.9% of startups, while 33.3% have protected their source code. There has also been an increase in design protection, from 7.1% in 2023 to 16.7% in 2024. Trade secrets and know-how are protected by 10.3% of startups.



PROTECTED INTELLECTUAL PROPERTY RIGHTS

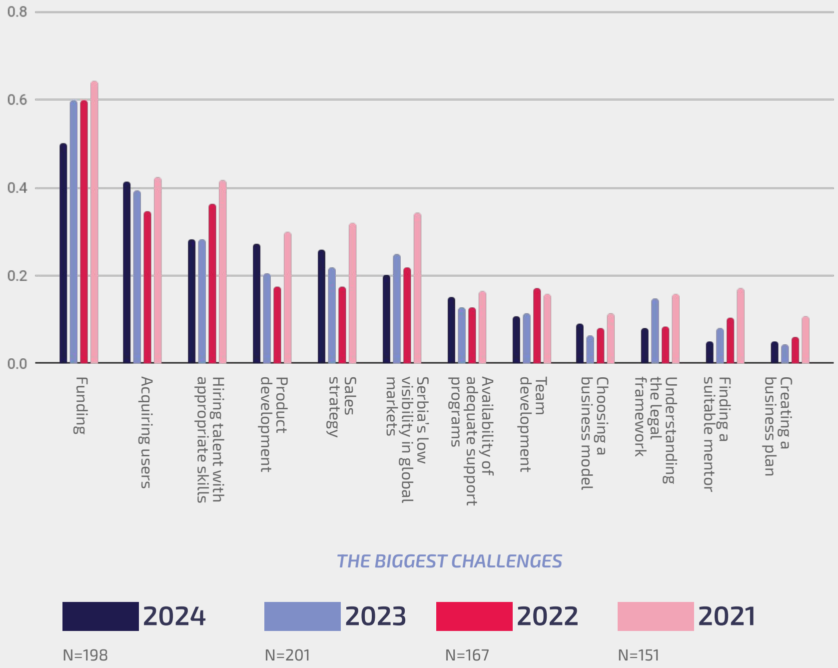
N = 78; Respondents were allowed to select multiple answers

BUSINESS STRATEGIES

CHALLENGES FOR STARTUPS IN SERBIA

An analysis of the challenges faced by startups in Serbia shows that funding remains the top concern (50%), although it has decreased by over 14% compared to 2021. The funding issue does not stem from a lack of available capital in the ecosystem — on the contrary, the amount of startup funding today is nearly double compared to that of five years ago. Many startups are still navigating the process of aligning with market expectations and achieving product–market fit, which is supported by the fact that nearly half are in early development stages — 25.8% in the MVP phase and 27.8% in the seed stage. This indicates that the challenge lies not only in accessing capital but also in startups' readiness to meet investors and market requirements.

In addition to funding, 41.4% of startups cite user acquisition as a major challenge, while 28.3% struggle to hire talent with the necessary skills and expertise. These three challenges have also stood out in previous studies, as shown in the comparative chart. Furthermore, the share of startups that cite product development as a key challenge has increased (27.3%), while the percentage of those that view Serbia's low visibility in global markets as an obstacle has slightly decreased to 20.2%.



THE BIGGEST CHALLENGES

CHALLENGES FOR STARTUPS IN SERBIA

Hiring qualified team members stands out as the third biggest challenge for startups, with 48.5% reporting difficulties in finding sales professionals and 31.3% struggling to recruit experts in the ICT sector.

Percentage of total number of startups

SALES	**48,5%**
ICT	**31,3%**
MARKETING	**18,2%**
RESEARCH & DEVELOPMENT	**18,2%**
MANAGEMENT	**13,6%**
FINANCE	**6,1%**
LEGAL	**4%**
DESIGN	**4%**
ADMINISTRATIVE TASKS	**2,5%**
CUSTOMER SUPPORT	**1,5%**
HUMAN RESOURCES	**0,5%**
NONE OF THE ABOVE	**10,1%**

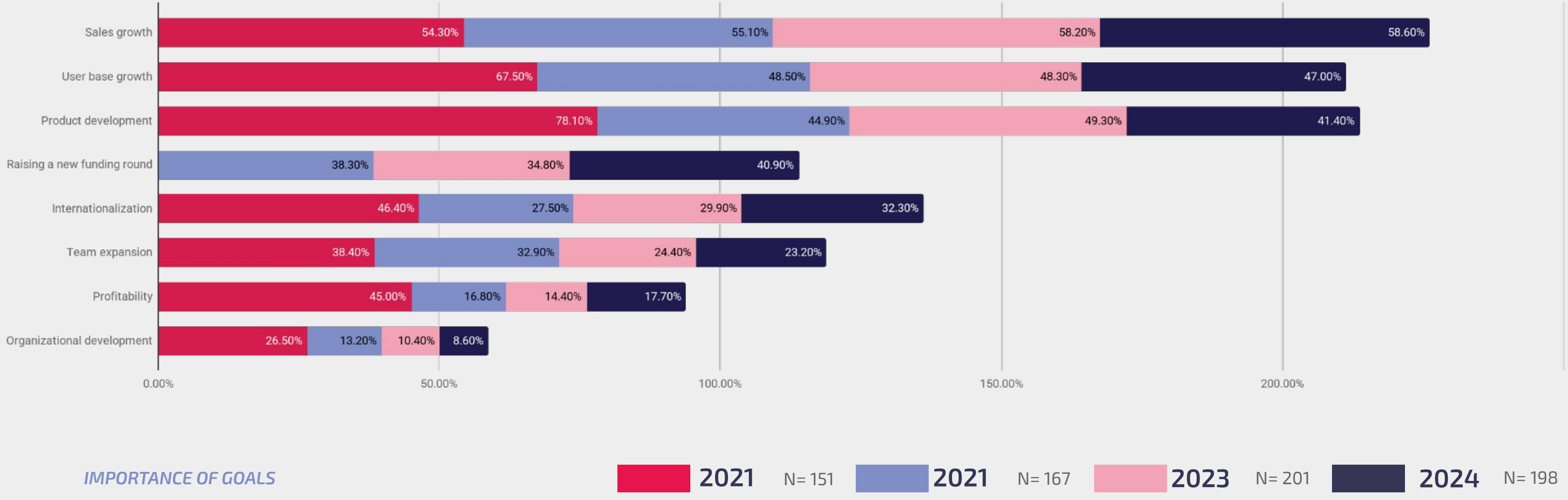
MOST DIFFICULT POSITIONS FOR HIRING

N = 198; Respondents were allowed to select multiple answers

GOALS

Our research results show that for several consecutive years, three goals have consistently remained top priorities for startups in Serbia — sales growth (58.6%), user growth (47%), and product development (41.4%). A more detailed analysis of startups that prioritize product development reveals that around 23% of them have not yet achieved product–market fit, despite having been in operation for more than two years.

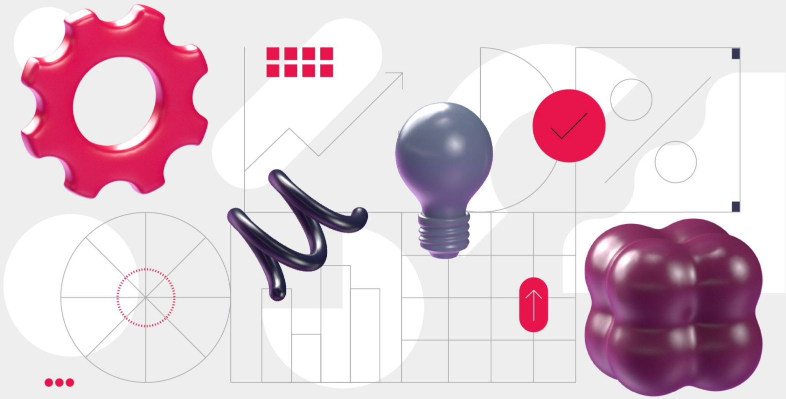
This finding further points to the immaturity of our ecosystem as well as to the fact that a number of teams have the potential to build successful startups based on innovative ideas, but either cease to exist or transition into innovative SMEs. Raising investment is a goal for 40.9% of startups, representing an increase from 34.8% in 2023. The percentage of startups focusing on internationalization is 32.3%, while 23.2% aim to expand their teams.



IMPORTANCE OF GOALS

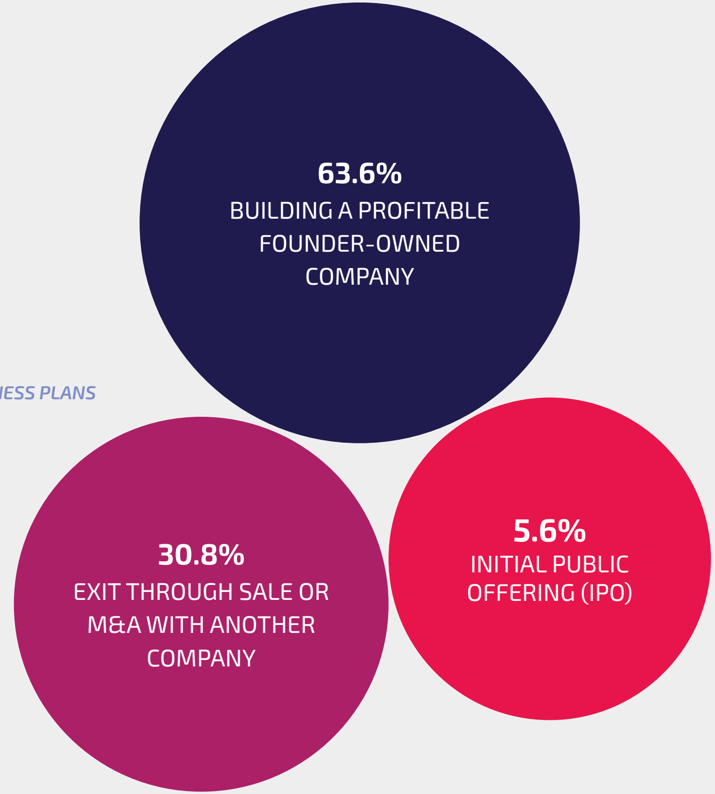
PLANS FOR FUTURE STARTUP OPERATIONS

As in previous years, a significantly larger share of founders (63.6%) plan to build a profitable company under their own ownership, compared to those aiming for an exit (30.8%) through a sale or M&A. This ambition remains at the core of entrepreneurial motivation among Serbian founders. On the other hand, 5.6% of startups plan to go public (IPO), which — given the current stage of development of Serbia's startup ecosystem — can be considered an exceptionally ambitious goal.



FUTURE BUSINESS PLANS

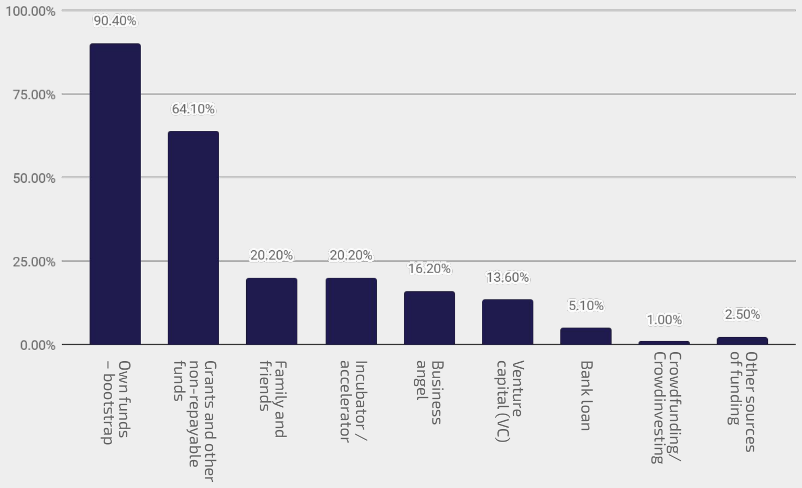
N= 198



FINANCING

The research shows that in addition to grants, funding from incubators/accelerators, business angels, and VC funds, the vast majority of startups (90.4%) still rely on personal funds for financing. The data also indicates that a significantly smaller share of startups — 16.2% compared to 29.35% in 2023 — manage to finance their operations solely through personal resources. Grants and other non-repayable funds represent the second most common form of financing, used by 64.1% of startups — up from 56.2% in 2023. An overreliance on grants and non-repayable funds tends to slow down startup development and limits the exposure of startups to market pressure. Additional analysis shows that grants are most frequently used by startups that are not profitable and do not generate monthly revenue — recognizing that they are unlikely to secure VC investment. The share of startups that, aside from grants and personal funds, have not accessed any other funding sources is 43.4%, a decrease from 51.2% in 2023.

So-called "smart money" options remain less prevalent — with 20.2% of startups funded through incubators and accelerators, 16.2% through business angels, and 13.6% through venture capital. In addition to financial support, these funding options provide valuable mentorship and access to networks, both locally and internationally. The relatively low share of smart money highlights the need for continued ecosystem support — including tax incentives for business angels, new funding sources, and the development of alternative financing mechanisms to stimulate innovation and growth.

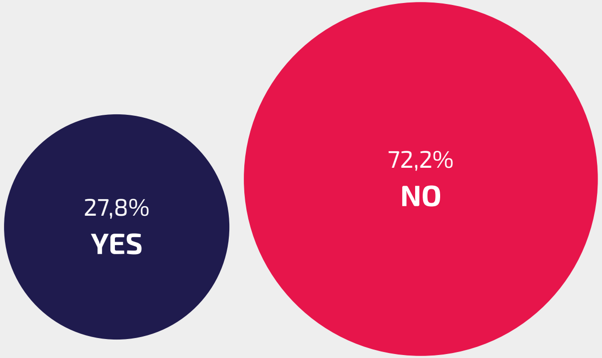


SOURCES OF FUNDING

N = 198; Respondents were allowed to select multiple answers

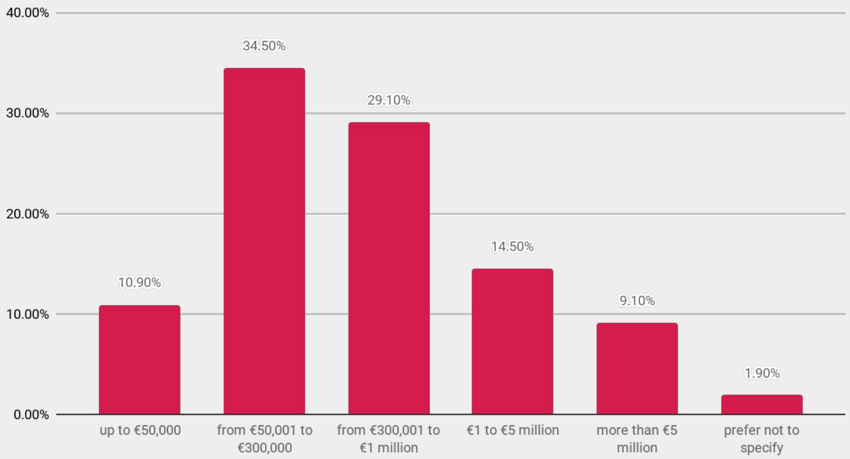
Funding remains one of the key challenges for startups. This year, less than one-third of startups (27.8%) secured external investment — a significant decrease from 44.8% in 2023. Among the startups that managed to attract external funding, 10.9% raised less than €50,000, while the majority (63.6%) raised between €50,000 and €1 million. In absolute terms, only 13 startups have secured external investment exceeding €1 million — and not in a single round, but across all funding rounds from their founding to date.

Has the startup received external investment or given up equity?



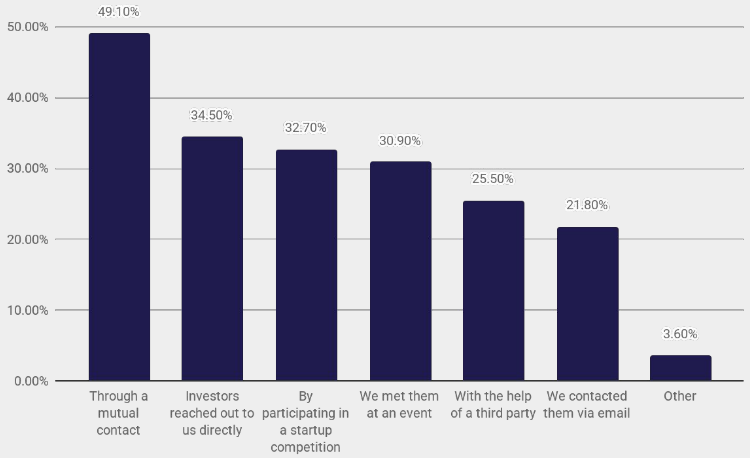
EXTERNAL INVESTMENTS

N= 198



EXTERNAL INVESTMENTS

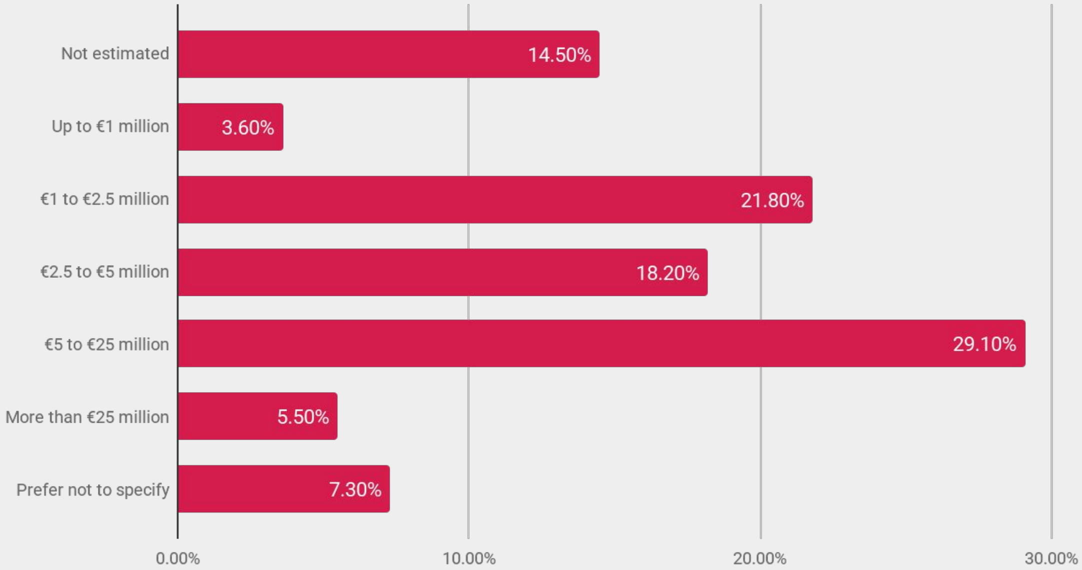
N= 55



N = 55; Respondents were allowed to select multiple answers

WAYS TO REACH INVESTORS

Among startups that successfully attracted external investment, the most common way of connecting with investors was through referrals from mutual acquaintances (49.1%). This highlights the importance of networking and confirms the effectiveness of building a pay-it-forward culture in securing investments that might otherwise be out of reach. The second most common channel was direct outreach by investors — reported by 34.5% of startups. Participation in public competitions and attendance at startup-focused events helped 63.6% of startups connect with investors.



N= 55

VALUATION IN THE LAST ROUND OF FINANCING

In terms of valuation, the vast majority of startups in Serbia (76.7%) do not have an estimated value. Among those that do, 20.7% report a valuation of €1 million or more — suggesting they have established some market presence and early results. When interpreting these findings, it is important to consider the level of subjectivity and accuracy in the self-reported data, as well as the total number of startups that participated in the survey.

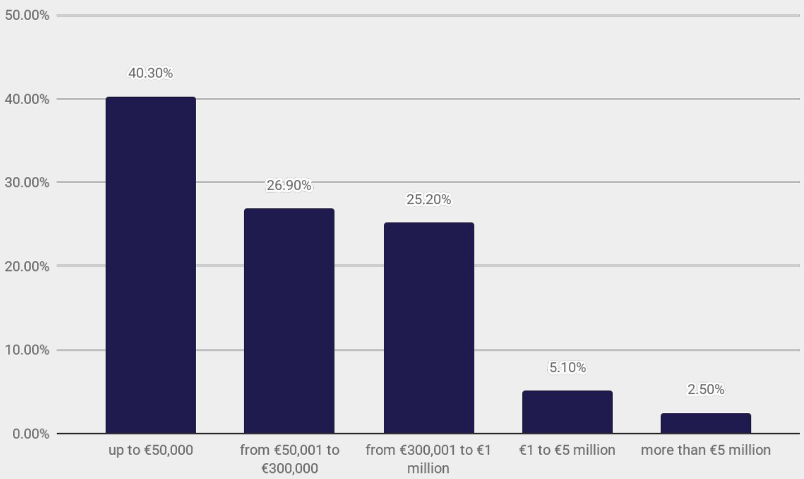
In terms of future financing plans, 39.9% of startups do not intend to raise external capital in the next 12 months — an 11% increase compared to 2023.

Overall, compared to 2023, there is a noticeable trend of startups planning to raise smaller amounts of capital. The focus has shifted from funding rounds in the range of €50,001 to €300,000 (down from 36.4% in 2023 to 26.9% in 2024) toward rounds of up to €50,001 (up from 9.8% to 40.3%). Additionally, the number of startups planning to raise more than €1 million has further decreased — only 7.6% in 2024 compared to 22.4% in 2023. These figures point not only to limited access to capital, but also to the fact that many domestic startups are still not investment-ready, as they do not meet the criteria of VC funds from more developed markets. There appears to be a lack of understanding of investment expectations within the ecosystem — as without significant MRR growth and presence in foreign markets, startups cannot realistically expect to secure VC funding.

Does the startup plan to raise investment or give up equity in 2025?

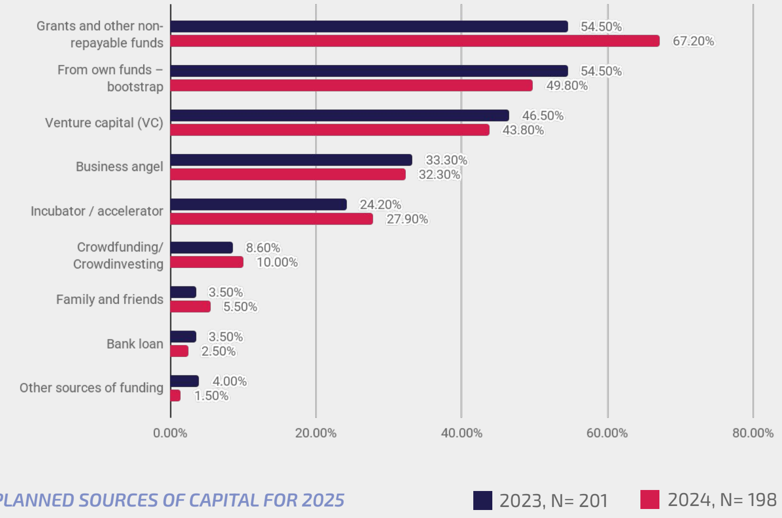
FUNDING PLAN FOR 2025

N= 198



FUNDING PLAN FOR 2025

N= 119



PLANNED SOURCES OF CAPITAL FOR 2025

A more detailed analysis of planned funding sources reveals a clear correlation with current MRR growth. Among startups without monthly revenue, as many as 69% plan to rely on grants and other non-repayable funds as their primary source of financing in 2025. Startups with MRR growth of up to 10% mostly plan to finance their further development through personal funds — this is the case for 70% of startups in this category. On the other hand, among startups with MRR growth above 10%, 67% plan to raise funding from VCs. Compared to previous years, fewer startups plan to rely exclusively on grants and bootstrapping this year — 15.7%, down from 28.9% in 2023.

CONNECTEDNESS, SUPPORT AND HUMAN CAPITAL

LOCAL CONNECTEDNESS

Local connectedness represents an indicator of the level of connectivity among actors in the local startup ecosystem. Considering the existing indicators of local connectedness, according to the Startup Genome report, this aspect can be viewed as the informal and formal networks and connections of local startup ecosystem actors. In an effort to determine the state of local connectivity, we sought to examine how various actors within the ecosystem provide support during the establishment and development of startups.

According to the analysis of survey responses, support organizations play a key role in both the founding and growth stages of startups. At the founding stage, 28.2% of startups received crucial support from these organizations. This trend continues during the development phase, where support organizations also lead, with 20.2% of startups reporting critical support from them. However, considering that 79.8% of surveyed startups participated in some form of the support program, it is concerning that the percentage of startups that feel they did not receive any support from support organizations has increased by 4.2% compared to 2023.

During the development phase of startups, a significantly higher percentage, 49.5%, report that support organizations have helped them. This percentage refers to startups in seed, growth, Series A or B phase. Support organizations played a key role during the development phase for 20.2% of startups, which is 8% less than in the founding phase, but overall indicates that their role remains highly significant. During the development phase, in addition to support organizations, which lead with a total of 69.7%, significant help was provided by colleagues and business partners (53.5%), who play a slightly larger role compared to the founding phase (47.4%).

LOCAL CONNECTEDNESS

SUPPORT FROM FORMAL AND INFORMAL NETWORKS IN THE STARTUP CREATION OR DEVELOPMENT PROCESS

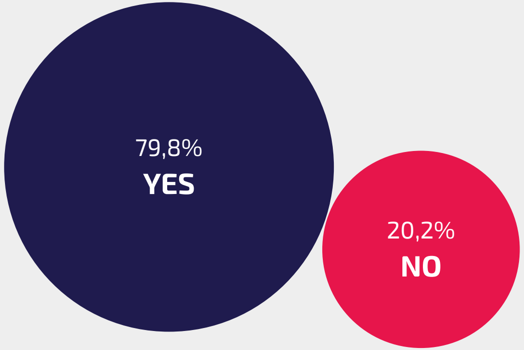
N = 177; Total number of startups that answered the question about the formation process,
N = 99; Total number of startups that answered the question about the development process, and that are in advanced stages of development (seed / growth stage / Series A or B)

SUPPORT SYSTEM FOR STARTUPS

SUPPORT ORGANIZATIONS (INCUBATORS AND ACCELERATORS)

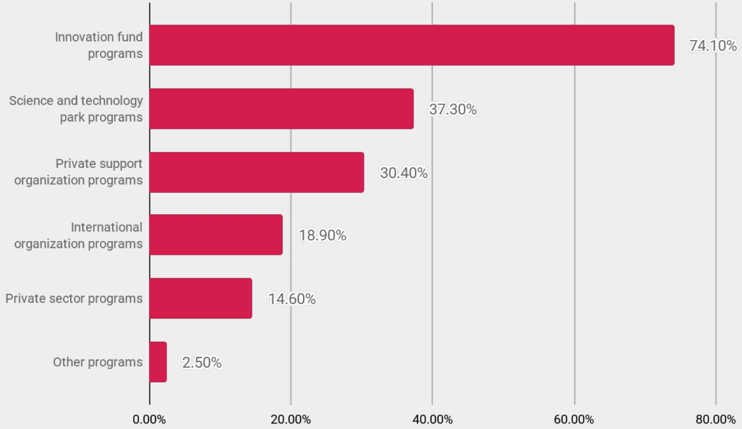
Support organizations (incubators and accelerators) play a key role both during the founding and development stages of startups, providing not only financial support but also mentorship and access to networks that are crucial for growth and scaling. Therefore, it is encouraging to see that the vast majority of domestic startups participate in support programs (79.8%).

Has the startup participated in any support program?



INCUBATOR/ACCELERATOR PARTICIPATION

N= 198



SUPPORT PROGRAMS

N = 158; Respondents were allowed to select multiple answers

Of the total number of startups that received some form of support, the largest percentage, 74.1%, cited the Innovation Fund. In second place are the programs of Science and Technology Parks, with 37.3% of startups participating. Programs from private support organizations, such as the Digital Serbia Initiative, NALED, ICT Hub, Impact Hub, and others, occupy third place with 30.4% representation.
Additionally, 18.9% of startups participated in programs organized by international donors (EBRD, SWISS Connect, European Union, IFC, British Council, etc.). Finally, 14.6% of startups participated in programs run by private sector companies like A1, OTP, Mozzart, Delta, etc.

PUBLIC POLICIES AND REGULATIONS — CREATING A FAVORABLE ENVIRONMENT FOR THE DEVELOPMENT AND FUNCTIONING OF THE STARTUP ECOSYSTEM

Through the research, we aimed to explore the expectations regarding public policies and legal regulations relevant to startups. The most common expectations include faster adaptation of regulations and laws to new business models (48.5%), increased transparency and financing options (44.9%), and the expansion of support programs (37.9%). The need for simplified use of digital platforms for payments and receipts from abroad is emphasized by 34.8% of startups, particularly those with MRR growth above 10% and those with significant presence in the European and US markets.

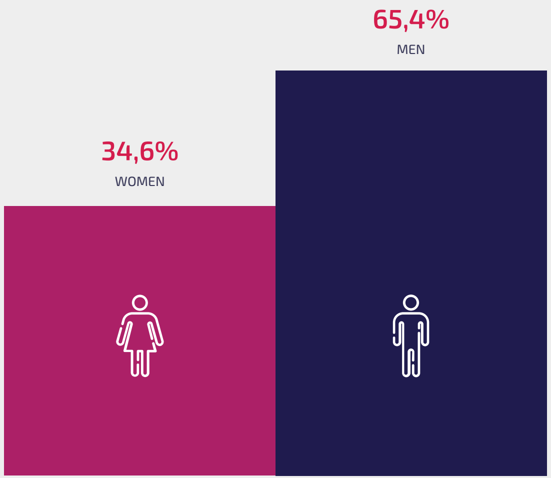
Expectations from public policies and regulation	% of total startups
Faster adaptation of laws and regulations to new business models	48,5%
Increased transparency and financing options	44,9%
More support programs	37,9%
Easier use of digital platforms for international payments	34,8%
Promotion of entrepreneurial thinking and skills in the education system	31,8%
Improving the status of entrepreneurship in society	27,8%
Support for technology transfer	13,6%
More opportunities for employee ownership in companies	13,1%
Other expectations	4,5%

POLICY AND REGULATORY EXPECTATIONS

N = 198; Respondents were allowed to select multiple answers

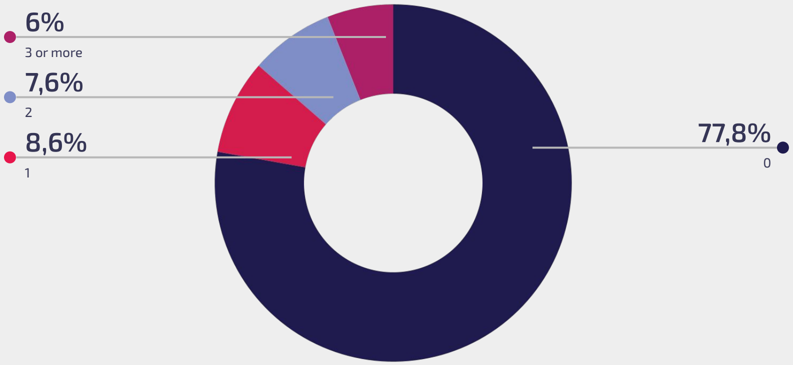
HUMAN CAPITAL

The percentage of women among employees is 34.6%, while the percentage of men is 65.4%. It is important to note that 26.3% of startups have no women among their employees, while only 3% of startups do not employ any men. The percentage of startups with no employees at all is 9.6%.



N= 198

GENDER STRUCTURE OF EMPLOYEES



FOREIGN EMPLOYEES

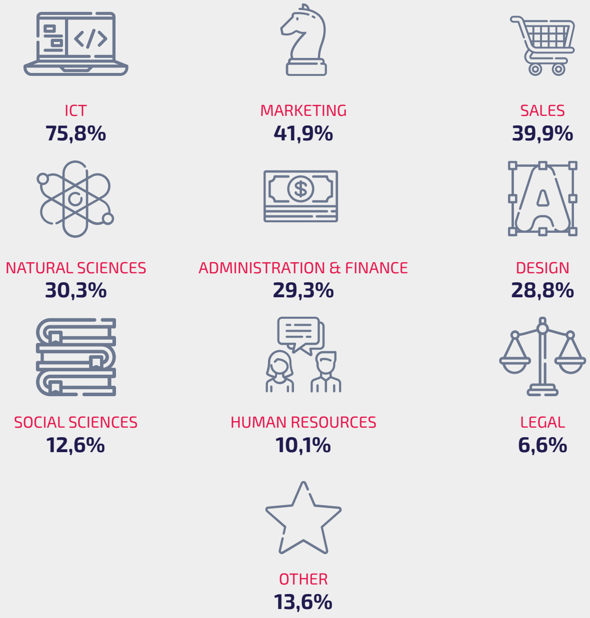
N= 198

22.2% of startups employ foreign nationals, which represents an increase compared to 2023, when the percentage was 16.4%. This growth indicates increased interest among Serbian startups in expanding into international markets, which require specific knowledge and expertise. The presence of foreign professionals in the startup ecosystem can play a significant role in its further development, as it contributes to the creation of new knowledge and connections with other ecosystems. Expatriates can also connect startups with their networks, helping to improve international connectivity and open up new business opportunities for startups. The internationalization of business and the development of the startup ecosystem could be further enhanced if, among other factors, conditions for hiring foreign nationals were improved.

HUMAN CAPITAL

When it comes to employee expertise, it is not surprising that 75.8% of startups employ professionals in the ICT sector. What is more surprising is that 24.2% of startups still do not have employees with this expertise.

In addition to ICT, the largest number of startups employ experts in marketing (41.9%) and sales (39.9%), highlighting the growing awareness among startups of the importance of sales and improving marketing strategies for achieving global success. The lower representation of fields such as human resources (10.1%) and law (6.6%) indicates a tendency to delay hiring in these areas until later stages of development.



AREA OF EXPERTISE OF EMPLOYEES

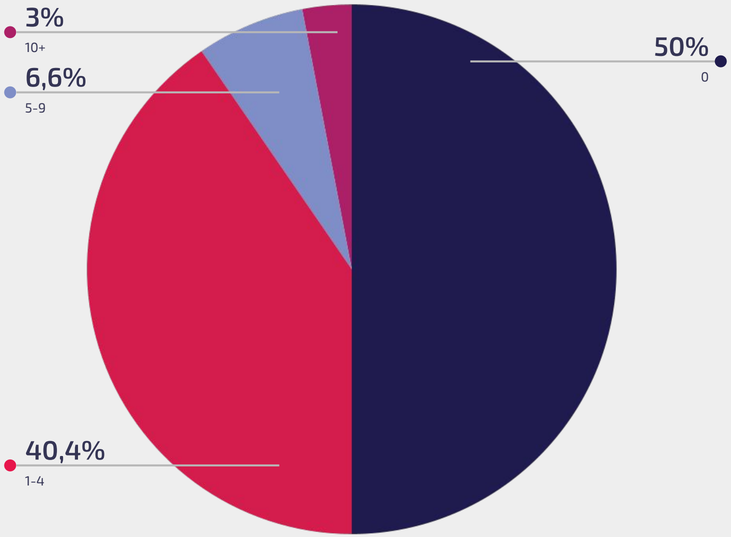
N = 198; Respondents were allowed to select multiple answers

EMPLOYMENT

In Serbia, during 2024, the trend of reduced employment in the IT sector continued, according to data from HelloWorld.rs — with a 25% decrease in new hires compared to the previous year[3]. This decline follows a reduction in IT job postings in 2023, where the first half of the year saw a 49% decrease compared to the same period in 2022[4].

Of the 198 surveyed startups, half (50%) did not hire any new team members in 2024. Those startups that did hire added a total of 385 employees, averaging 3.89 new hires per startup.

Looking at the data, if we add to the 50% of startups that did not hire any new team members the 40.4% that hired between one and four people, it becomes clear that 90.4% of startups in the ecosystem were unable to significantly grow their teams in 2024. An analysis of MRR growth and employment data indicates that startups with higher monthly revenue tend to hire more. 28.6% of startups with MRR growth over 10% hired more than three people, while for those with lower growth, this percentage was 15% lower. In contrast, 96.6% of startups with no monthly revenue did not significantly increase their teams in 2024.



NEW HIRES IN 2024

N= 198

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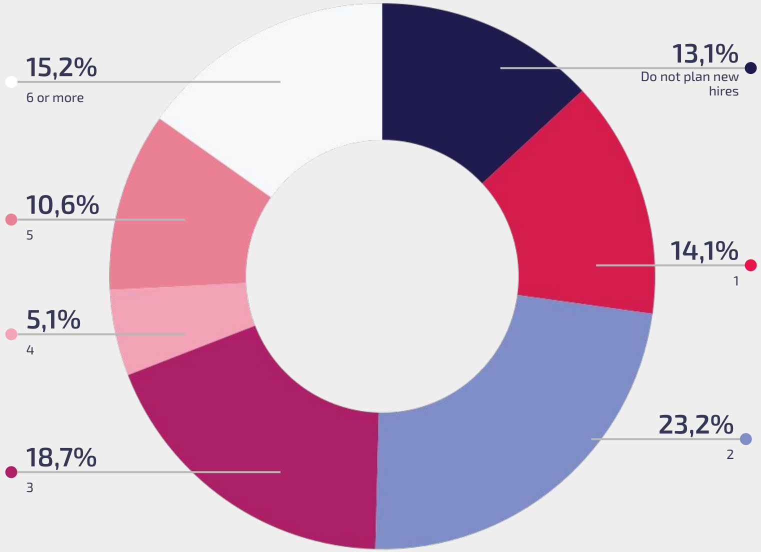
[3]Helloworld.rs - *Ponuda oglasa za IT poslove i dalje u padu*
[4]Helloworld.rs - *IT tržište Srbije: Nastupa faza stabilizacije broja oglasa*

When comparing the employment data for 2024 with the hiring plans of startups from last year's Startup Scanner, it is evident that startups had planned to hire 794 new team members in 2024. When comparing the estimated size of the ecosystem at the time of the Startup Scanner 2024 and this year's data, we can conclude that Serbian startups planned to hire nearly 2,500 new employees in 2024, but realistically hired about 1,100 people. A similar situation occurred with the Startup Scanner 2023, where results showed that startups planned to hire over 3,000 people, but only managed to hire less than 1,500. In other words, for the second consecutive year, startups had overly optimistic hiring projections.

The majority of startups (86.9%) plan to expand their teams in 2025 by a total of 806 new members, averaging 4.1 new team members per startup. By comparing data from 2023 and 2024, we see that hiring plans are similar to last year, when startups planned to expand their teams by an average of 3.95 new members.



NUMBER OF PLANNED NEW HIRES IN 2025

N= 198

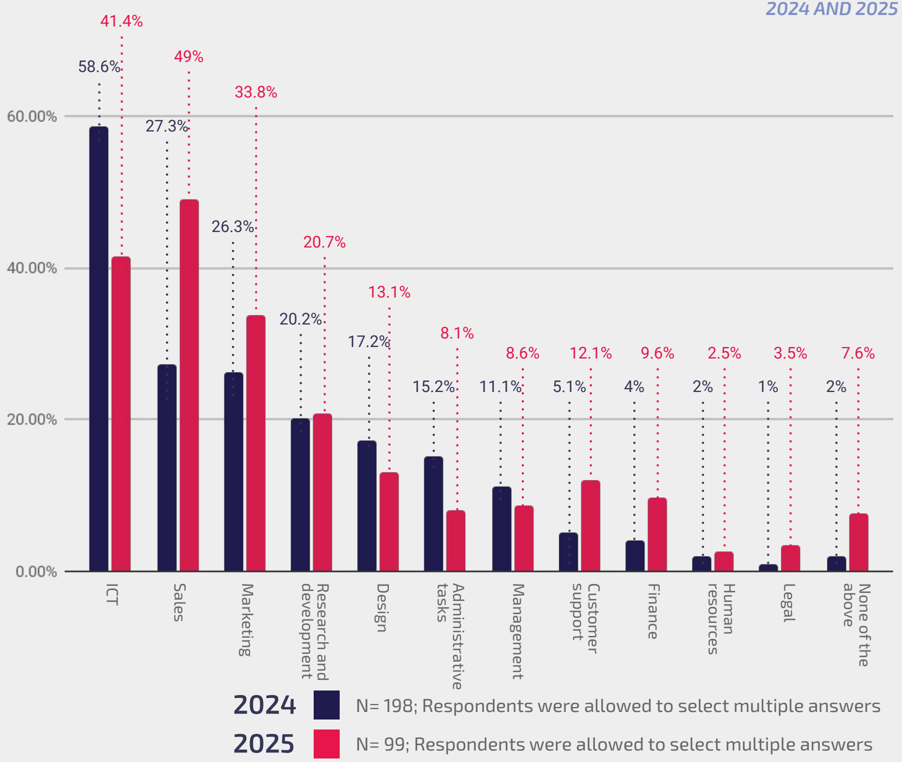
Among startups that opened new positions in 2024, nearly one-third (29.3%) expanded their teams with new IT professionals. When looking at other areas of expertise needed by startups, sales and marketing should be particularly highlighted. Positions in sales and marketing dominated the roles that startups planned to fill in 2024 — 56.2% of startups planned to hire in the sales sector, and 44.3% in the marketing sector. However, only 13.6% of startups hired new members in sales, and 13.1% in marketing, which is significantly lower not only compared to their 2024 hiring plans but also in comparison to hiring in these sectors in 2023 and 2022. Startups with no monthly revenue are less likely to plan hiring in sales (36.7%), indicating insufficient understanding of the importance of a sales team for growth and expansion into new markets. Startups with higher MRR growth are more likely to invest in the sales, with 59.6% of startups with MRR growth up to 10% and 50% of those with MRR growth above 10% planning to hire in this area.

YEAR	2021	2022	2023	2024	2025
	N=151	N=167	N=201	N=198	
HAS EMPLOYEES WITH MARKETING EXPERTISE	45.7%	44,3%	43,8%	41,9%	
HAS EMPLOYEES WITH SALES EXPERTISE	38,4%	43,7%	37,3%	39,9%	
PLANNED HIRING IN MARKETING		50,3%	49,1%	44,3%	33,8%
PLANNED HIRING IN SALES		11,3%	51,5%	56,2%	49%
EXPANDED MARKETING TEAM		19,7%	16,4%	13,1%	
EXPANDED SALES TEAM		17,9%	17,4%	13,6%	
BELIEVES MARKETING ROLES ARE HARDEST TO FILL	17,2%	16,2%	17,9%	18,2%	
BELIEVES SALES ROLES ARE HARDEST TO FILL	30,5%	44,3%	44,3%	48,5%	

NEEDS AND HIRING IN THE SALES AND MARKETING FIELD

The hiring plans of startups for 2025 show that, as in previous years, the sectors of sales, ICT, and marketing remain the most in demand. Following them with significantly lower percentages are research and development, design, and customer support.

TEAM EXPANSION AREAS IN 2024 AND 2025



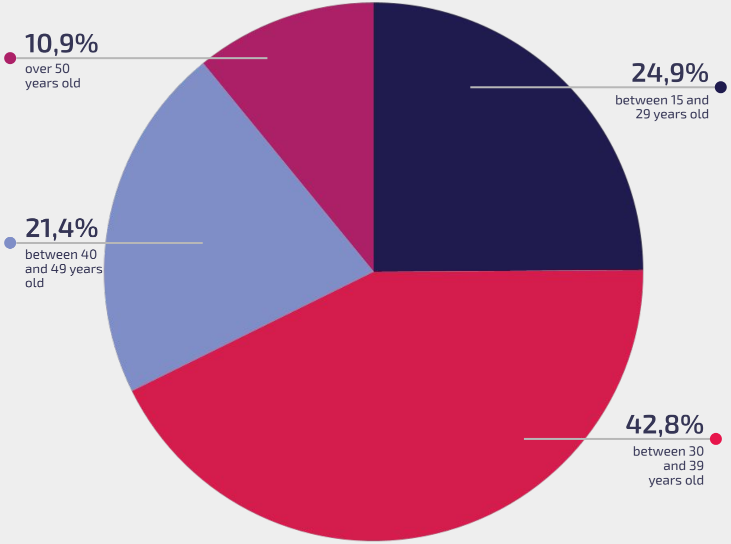
FOUNDER PROFILE

The Startup Scanner 2025 confirmed the findings from previous years, showing that the majority of startup founders in Serbia are men, aged between 30 and 39 years, with a university degree, and currently residing in Serbia. Most of their relevant knowledge for founding and running startups was acquired through previous work experience.

AGE AND GENDER STRUCTURE OF FOUNDERS

The research shows that the largest age group of startup founders in Serbia is between 30 and 39 years, making up 42.8% of respondents. Founders in the 40 to 49-year-old category account for 21.4% of the total, while young founders between 15 and 29 years of age represent 24.9% of startups, which is a decrease of 3.3% compared to 2023. On the other hand, 10.9% of founders are over 50 years old, marking an increase from 5.3% in 2023.

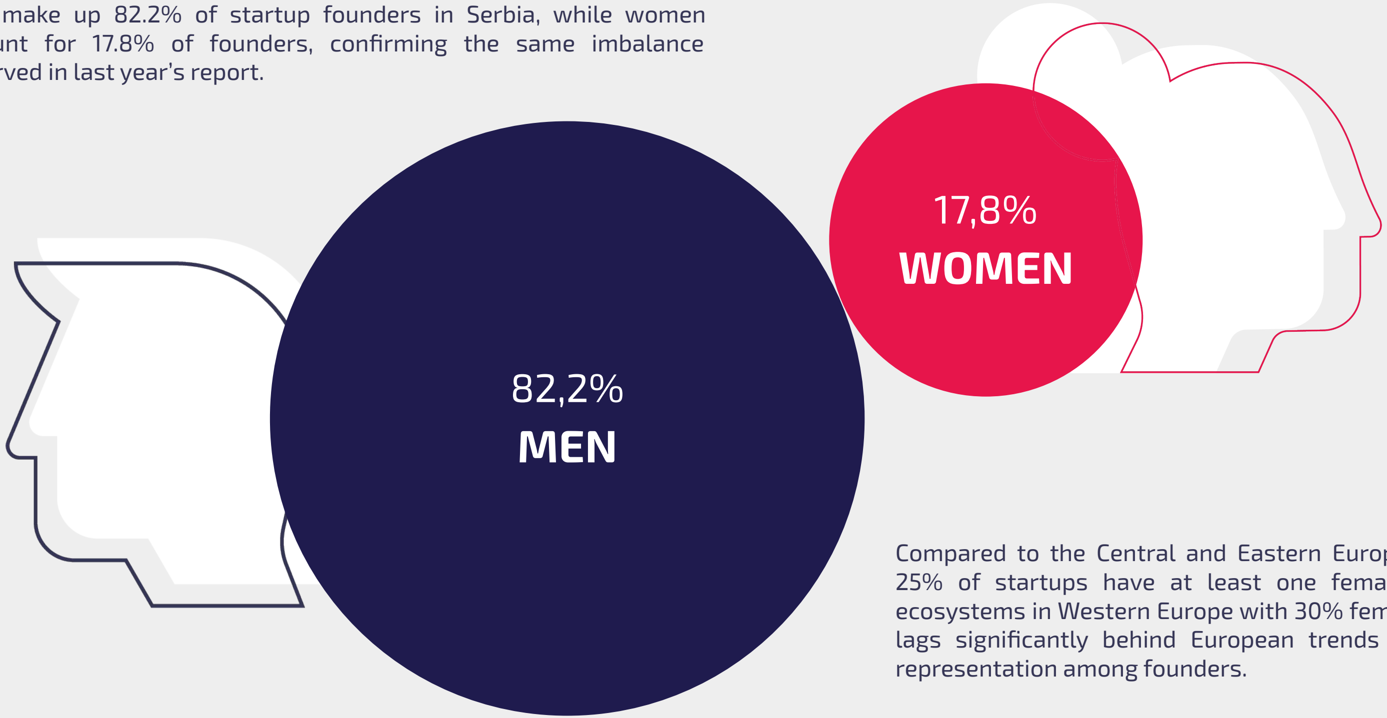
THE AVERAGE AGE OF STARTUP FOUNDERS IN SERBIA IS 36.47 YEARS



FOUNDERS AGE

N= 173

Men make up 82.2% of startup founders in Serbia, while women account for 17.8% of founders, confirming the same imbalance observed in last year's report.



GENDER OF FOUNDERS

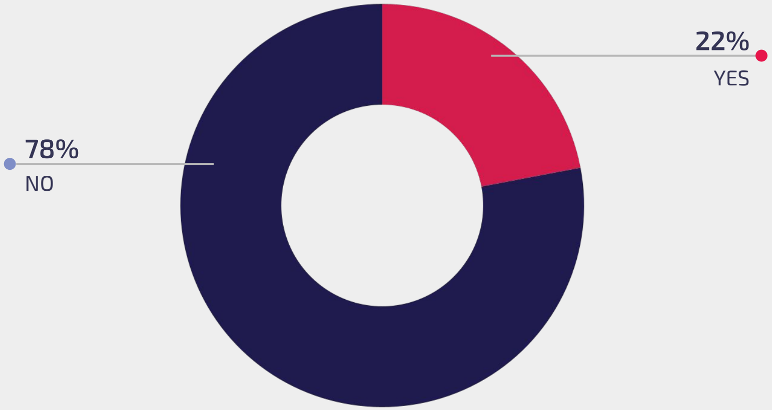
N = 545; Total number of founders, based on a sample of 198 startups

Compared to the Central and Eastern European average, where 25% of startups have at least one female founder, and top ecosystems in Western Europe with 30% female founders[5], Serbia lags significantly behind European trends in terms of female representation among founders.

5 https://emerging-europe.com/analysis/empowering-founders-in-europes-start-up-ecosystem/

RETURNING EXPATS

Among the participants in the survey, 22% are returning expats, which represents an increase from 17% in 2023. They bring with them experience and skills gained in foreign ecosystems, helping to stimulate and enhance the domestic startup ecosystem. Their contribution is not only in creating global networks and facilitating access to foreign investors and markets, but also in the transfer of knowledge and innovation, which increases the competitiveness of Serbian startups on a global scale.



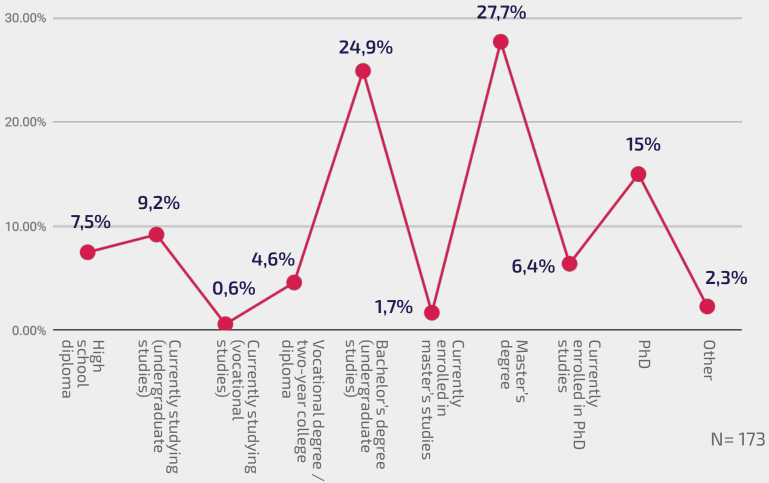
N= 173

LIVED ABROAD AND RETURNED TO SERBIA

EDUCATIONAL BACKGROUND

An analysis of the educational background of startup founders in Serbia shows that 80.3% of founders have a higher education degree. 27.7% of founders hold a master's degree, 24.9% have a bachelor's degree, and 15% hold a PhD, which represents an increase compared to 2023 (8%). A smaller percentage, 7.5% of founders, have a high school diploma, while 9.2% are currently studying for their bachelor's degree and 6.4% for their PhD.

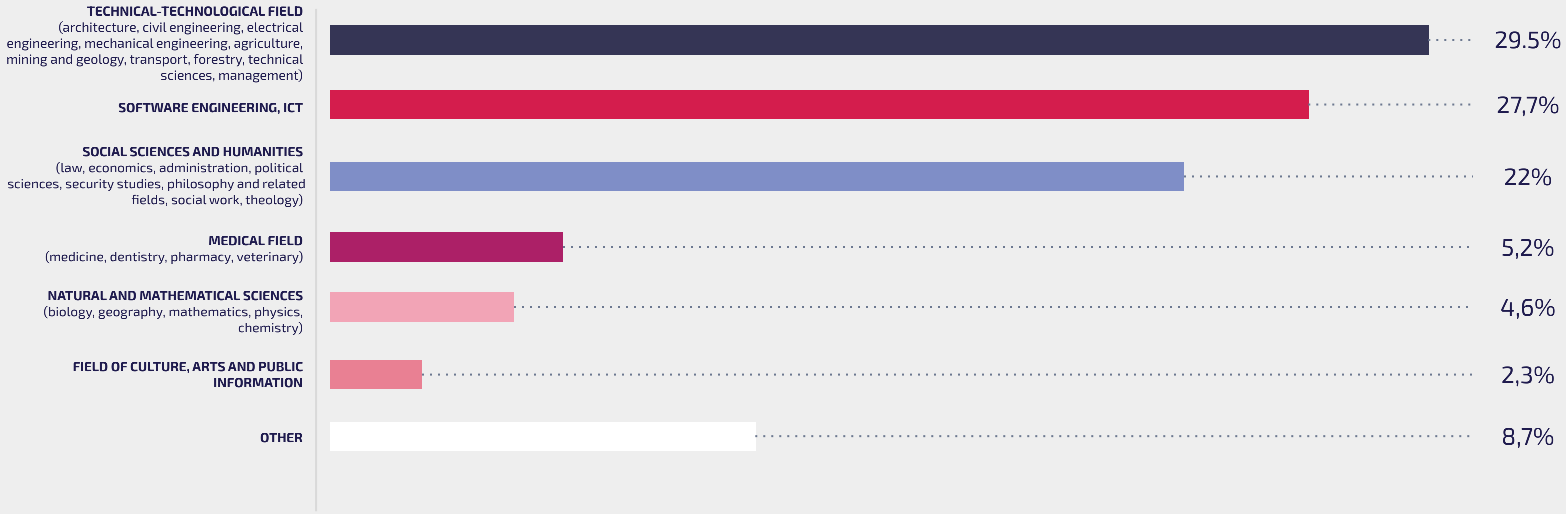
EDUCATION OF FOUNDERS



N= 173

The research results show that the largest share of startup founders holds degrees in technical and technological fields (29.5%). This is followed by founders with degrees in software engineering (27.7%), while the social sciences and humanities fields are represented by 22% of founders.

It should be noted that respondents were allowed to select multiple answers. The field of medical sciences is represented by 5.2% of founders, which is a slight increase compared to the previous year (1.6%) and potentially reflects the strategic priority related to Biotech / MedTech.

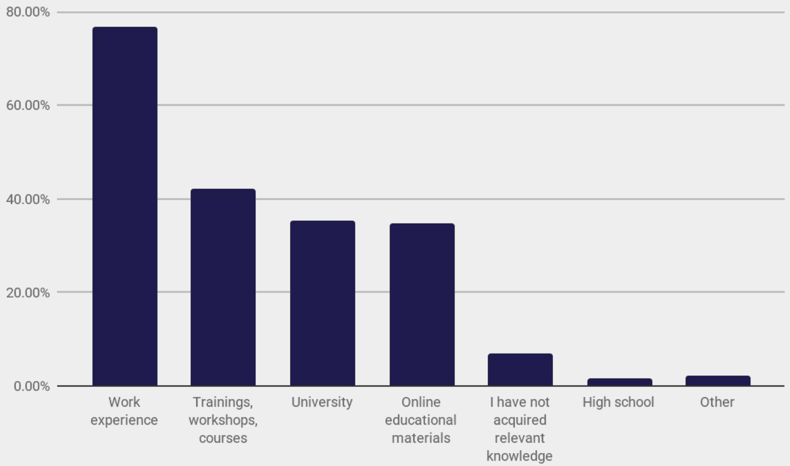


FIELDS OF EXPERTISE OF NON-TECH FOUNDERS

N = 124; Respondents were allowed to select multiple answers

PREVIOUS EXPERIENCE

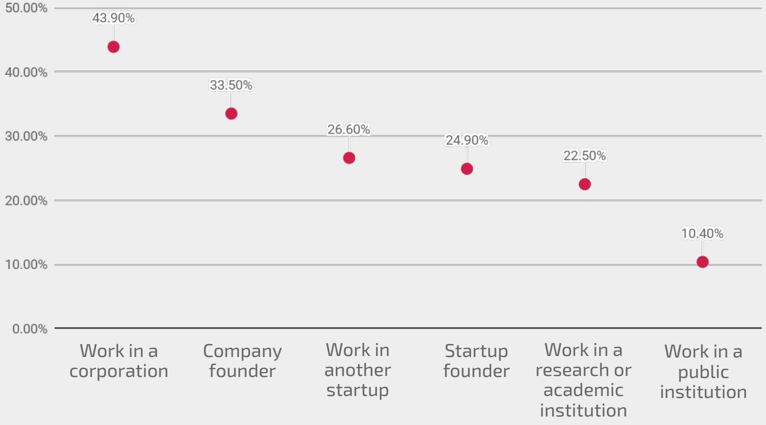
The majority of startup founders (76.9%) state that the key knowledge for establishing and running a startup was acquired through previous work experience. Training, workshops, and courses are the second most common source of knowledge (42.2%), followed by online educational materials (34.7%), just behind formal academic education (35.3%). These findings confirm that practical skills and experience are crucial in developing entrepreneurial ventures in the startup ecosystem. Only 6.9% of respondents believe they have not gained relevant knowledge for running a startup from any source.



MANNER OF ACQUIRING RELEVANT KNOWLEDGE

N = 173; Respondents were allowed to select multiple answers

The results show that a significant portion of startup founders in Serbia have previous work experience in corporations (43.9%), while a third (33.5%) have prior experience in running their own company. Many founders come from an entrepreneurial background, with 26.6% having worked at another startup, and 24.9% already having experience as startup founders. This result aligns with European trends, as per the 2024 Atomico report, which states that 26% of founders are serial entrepreneurs. Just over one-fifth (22.5%) of startup founders have gained previous experience in academic and research institutions, while 10.4% have worked in government institutions.



PREVIOUS EXPERIENCE

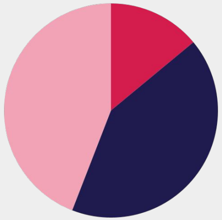
N = 173; Respondents were allowed to select multiple answers

Among respondents we identified 43 startup founders that previously had a startup. Nearly half of the ventures (44.1%) of those founders were unsuccessful, while 41.9% are still active and operating. A smaller share of founders experienced an exit — through acquisition or merger with another company — a path taken by 6 respondents.

WHAT HAPPENED TO YOUR PREVIOUS STARTUP

N= 43

14%
We had an exit
41,9%
It is still operating
44,1%
It failed



The majority of founders (60.1%) are fully dedicated to their startups as their primary occupation, while 25.4% are simultaneously engaged in the private sector, and 14.5% in the public sector.

SECOND ENGAGEMENT BESIDES LEADING THE STARTUP

N= 173

60,1%
No
25,4%
Yes – in the private sector
14,5%
Yes – in the public sector

ACKNOWLEDGMENTS

We would like to thank all the organizations that supported the project and, in particular, encouraged startups to participate in the survey.

STARTUP SCANNER 2025

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