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# STARTUP SCANNER 2023

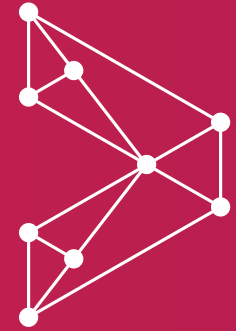
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# STARTUP SCANNER 2023

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**This research has been made possible with the support of the American people through the United States Agency for International Development (USAID). The contents of this research shall be the sole responsibility of the Digital Serbia Initiative and can in no way be taken to reflect the views of USAID or the US Government.**

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# KEY FINDINGS

***The Serbian startup ecosystem has recorded exponential growth in the past few years. This is clearly shown in the addition of more than 2,000 new employees in 2022 and a projected 3,000 new jobs in 2023. However, this rapid growth has brought challenges in areas of expanding into new markets, access to funding, and finding suitable staff. A comparison of year-to-year results shows a consistent trend in sales increase, capital raising, and hiring new team members. Over two thirds of startups predict their business would grow by over 50% in 2023. This confirms our position that knowledge and innovation are the greatest opportunity for Serbia and the startup ecosystem can be the driver of the country's business and economic development.***



## FOUNDERS PROFILE

**More than a third of startups (36%) have at least one woman in the founding team.**

A fifth of founders (21%) have lived part of their lives abroad.

Large majority (81%) of founders have a University degree (bachelor, master or PhD).

Many respondents (38%) have already taken part in founding at least one startup before the current entrepreneurial endeavor, while one third (33%) had previous experience in working at a startup.

**More than half of startups (63%) have non-technical founders.**

80% founders said they acquired knowledge important for founding and operating startups through their work.

## STARTUP PROFILE

**In most cases (84%) a startup is the team endeavor.**

**Majority of startups (66%) were registered as legal entities between 2020 and 2022.**

**Most startups are preparing themselves to enter the markets - 22% have MVP, but are not in the market yet, while 33% have their first customers and are testing product-market fit.**



## FUNDING AND BUSINESS OPERATION

**Over 60% of startups see the new markets and customer access, as well as product or service development as main goals of collaboration with global partners.**

**Most startups (65%) are not profitable yet.**

**45% of startups place their products in the EU markets, while 31% in the US market.**

**In 2022 more than 2,000 new team members were employed within the Serbian startup ecosystem.**

**Based on the research we estimate that 3,000 new jobs are planned to be created in the startup ecosystem for 2023.**

**Almost two thirds of startups (63%) predict their business will grow by over 50% in 2023.**

## STARTUP SUPPORT

**Startups have so far been predominantly financed through their own resources (92%) and grants (60%).**

**According to respondents' opinions, funding, employment and attracting customers are the three major challenges for startups.**

**Founders received main support through the social network such as family, friends and acquaintances, but also through formal support, such as startup support organizations (incubators, accelerators).**

**Majority of respondents (68%) see tax deductions and tax reliefs as major expectations from public policies.**

# Introduction

**The Startup Scanner is a research that the Digital Serbia Initiative is conducting for the third time, the second time within the "Venture an Idea" project, which the consortium gathered around the Digital Serbia Initiative is conducting with the support of USAID. The aim of this research, apart from identifying startups, is to enable a comprehensive analysis of their development and factor of success, and through this the development analysis of the entire ecosystem. Also, this research aims to enable continuous analysis of data and results which would lead to drawing relevant conclusions and following directions and trends within which the Serbian ecosystem moves and develops, but also to provide relevant information to policy makers in the field of research, technology, innovation and entrepreneurship. Data to be presented within Startup Scanner 2023 include a sample of 167 startups that responded to our call to participate in this year's online survey and provide information and insights on their status, development, challenges and future plans, not only regarding startups, but the entire ecosystem surrounding startups in Serbia.**

**We would like to use this opportunity to express our gratitude to our project partners, as well as all organizations supporting this survey, but first of all to the very founders of more than 160 startups whose participation contributed to the success of this survey: A BIG THANK YOU!**

**We hope you will enjoy reading this year's Startup Scanner and look forward to working together even more and to present new successes of our startup ecosystem in the following years.**



**Nebojša Bjelotomić**  
CEO "Digital Serbia Initiative"  
Project Director "Venture and Idea"

# Current status and future of the startup ecosystem in Serbia

A conclusion can be drawn from last year's survey that the Serbian startup ecosystem has been developing rapidly and that there is a large potential for further growth and development. The encouraging fact is that in the past three years the startups in the local ecosystem experienced growth by 20% to 30% year over year. This exponential growth shows that there are more new startup founders and a growing interest for the startup ecosystem as well as for creation of innovative products with the potential of global success.

The previous year was important for the ecosystem as it showed that the startup community can have a substantial impact on the entire economy of Serbia, considering the estimate that last year startups hired over 2,000 people, while this year startups plan to fill in 3,000 new jobs and the majority of startups predict their business will grow over 50%. Additionally, a plan to open two new VC funds in 2023 contributed to this. These funds will be supported by government subsidies and their investments will be primarily focused on the Serbian startup ecosystem and region of Western Balkans. In addition to one CVC fund, TS Ventures, and mentioned two new VC funds (Omorika Ventures and 5th Quarter Ventures) that will operate in Serbia, and a group of business angels founded by the Digital Serbia Initiative, there is a number of foreign and regional VC funds entering the local ecosystem, very interested in meeting our startups and actively following their further development. Taking into consideration these data we believe that the bootstrapping trend, which has been largely present, will decline over the next several years. However, one should not forget the fact that 66% startups in total were registered in Serbia between 2020 and 2022 mainly thanks to grants and early stage funding.

The Serbian ecosystem, although still relatively young, enters a mild stage of scaling, which requires monitoring through different support systems, as well as through the

adopting adequate public policies that would support startups and facilitate their operation. In addition to introducing stimulating tax incentives it is important to systematically create other favorable conditions for startup funding and development, as well as to ensure access to new markets and customers both at the local and international level. In the next period the focus will be on introduction of mechanisms to improve investments through convertible note and SAFE (Simple Agreement for Future Equity) mechanism. As well as the Introduction of rules for establishing special syndicated funding by a larger number of angels-investors. Through the establishment of technology transfer centers with competent staff, better communication between participants, and the creation of uniform regulatory rules, the aim is to increase the number of ideas and innovations coming from the academic community. These will then take economic form in collaboration with industry, resulting in an increase in the number of inventions, the establishment of startups, and the inflow of capital.

It is obvious that Serbia has great potential for startup ecosystem development and is becoming more attractive for establishing and developing startups. However, in order to further develop and grow the local startup ecosystem, it is necessary to keep identifying and overcoming key challenges startups face, as well as continue improving conditions and support networks.



# STARTUP ECOSYSTEM IN SERBIA

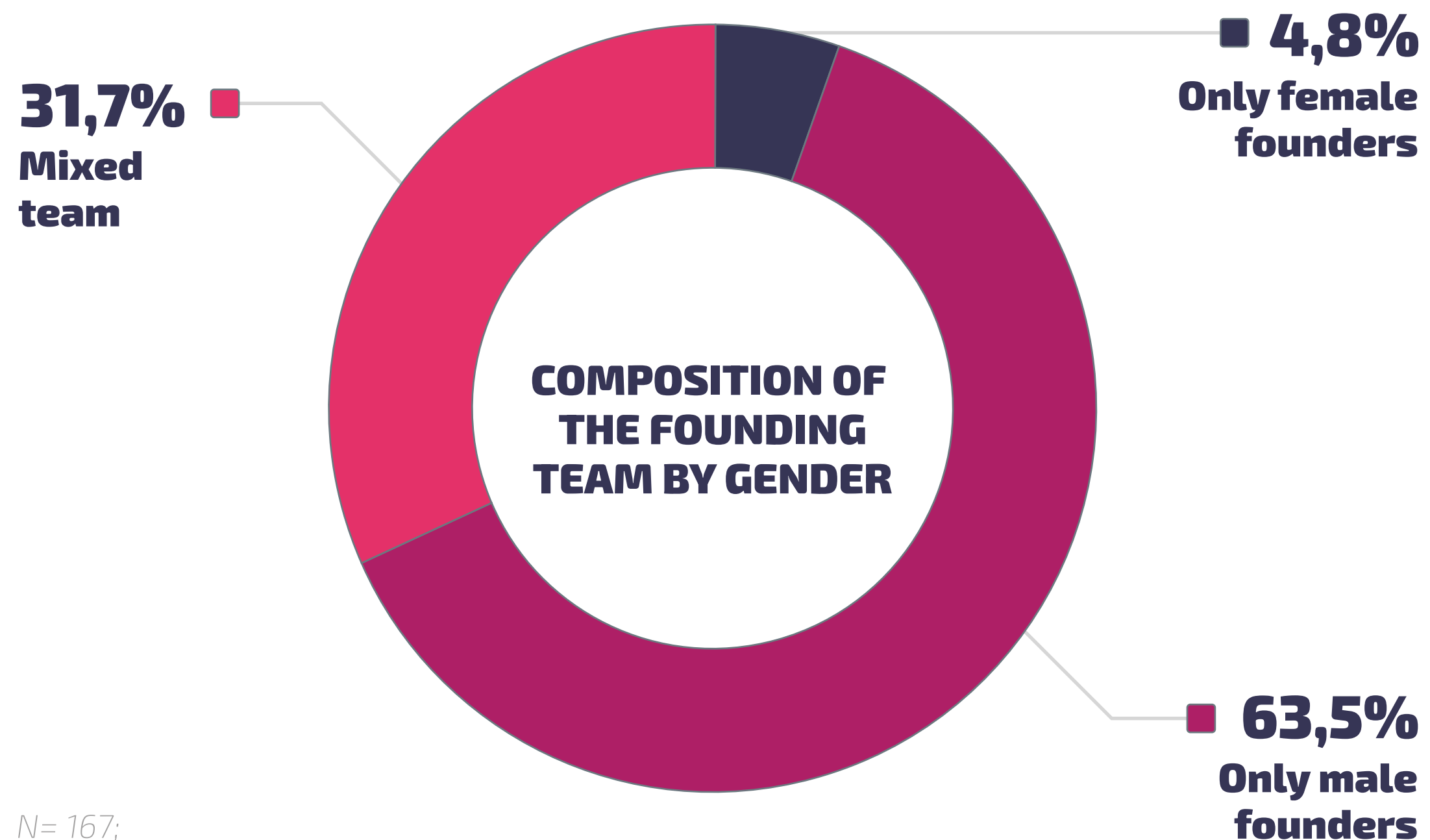


# PROFILE OF A STARTUP

## A FOUNDING TEAM STRUCTURE

Survey results, from both this and last year, clearly show that founding a startup is most often a team effort, which is the case for the majority of startups 83.8%. The average number of founders is 2.73 — indicating that the largest number of startups was started by a team of two (35.9%) or three (26.3%) founders.

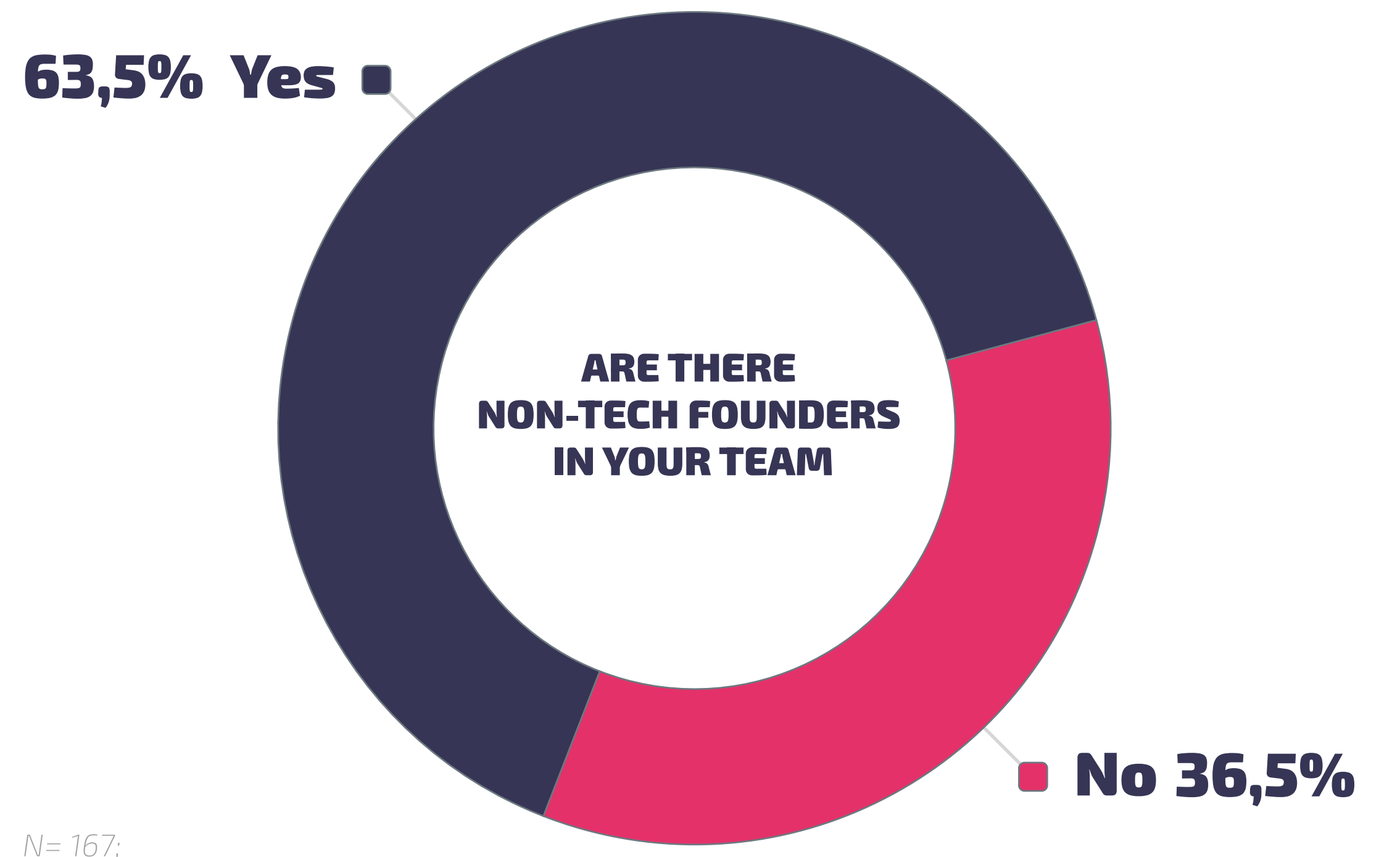
When considering the gender composition of founding teams, it is noticeable that majority of startups have all-male founding teams (63.5%), which matches the findings of European Startup Monitor<sup>1</sup>. On the other hand, only 4.8% of startups were founded exclusively by female teams. Also, it would be good to emphasize that the remaining 31.7% of startups have both men and women in their founding teams, which is a little above European average.



N= 167;

<sup>1</sup>European Startup Monitor 2020/2021  
<https://www.europeanstartupmonitor2021.eu/>

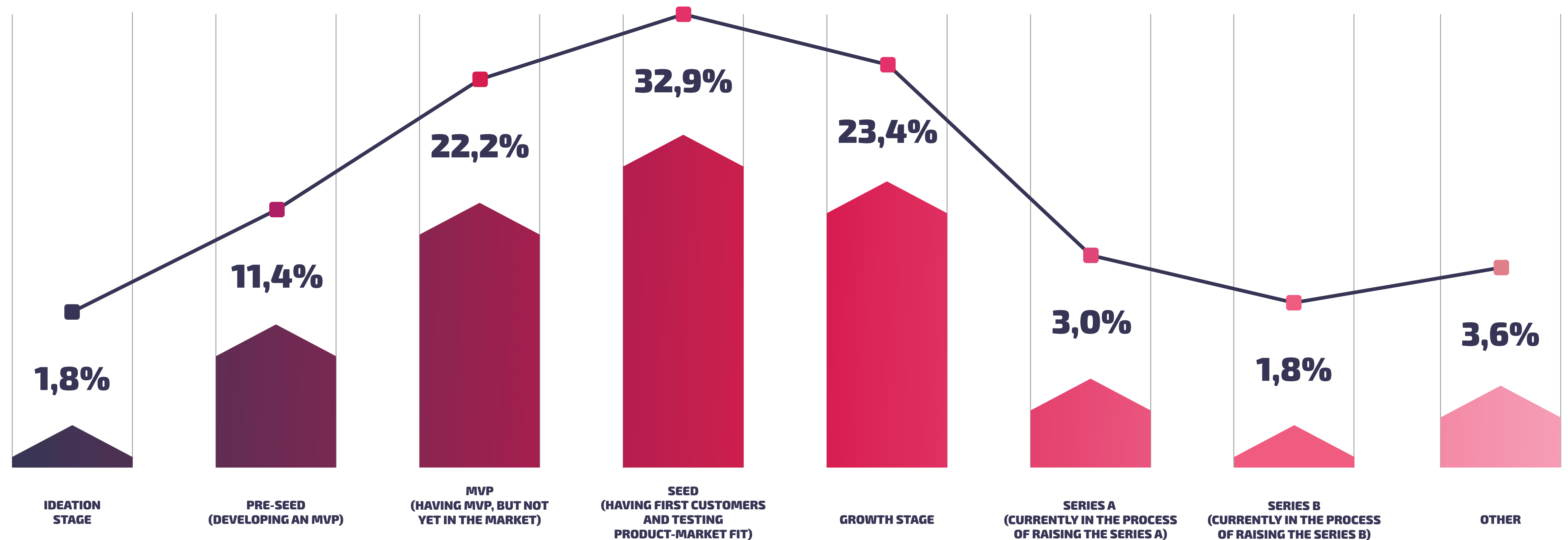
In addition to founders with tech background, successful startups have been founded by people with domain knowledge and expertise in other fields like marketing, sales, finance, design, etc. Pooling of diverse expertise and forming multidisciplinary teams is in fact one of the key success factors in the world of technological entrepreneurship. In that context, looking at the fields the founders come from, the key point is that 63.5% of startups have non-technical founders in their founding teams, thus contributing to the versatility and innovation of the entire system.



N= 167;

## DEVELOPMENT STAGE

A result-based conclusion can be made that the Serbian ecosystem is in the intensive growth stage, given that a significant number of startups already tested their products successfully and attracted their first customers (32.9%) or moved to the growth stage looking how to expand their operation (23.4%).

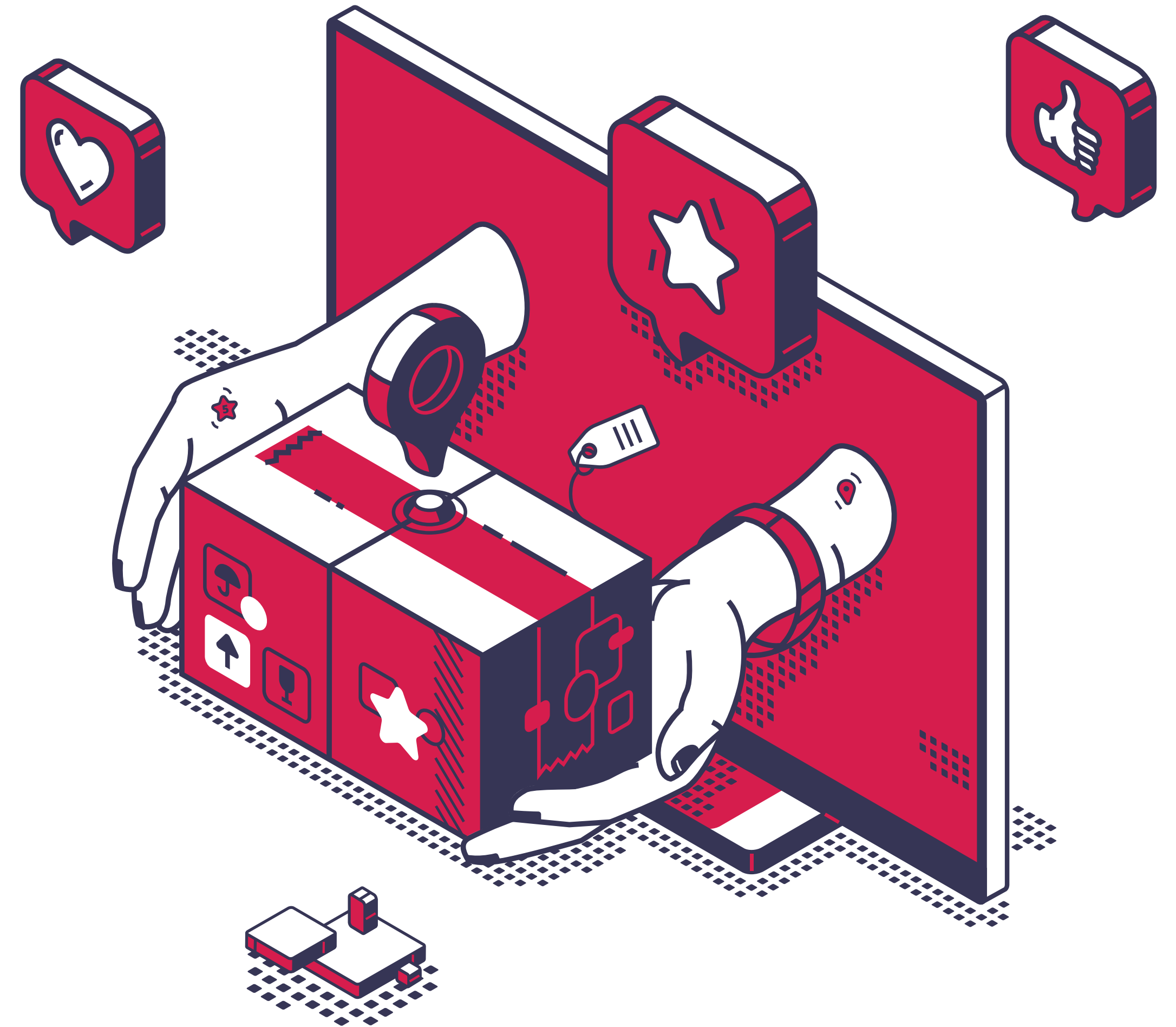


These results indicate exponential growth of the Serbian ecosystem in the past decade, with the most impressive growth recorded in the 2020-2022 period. If this growth trend continues, we may expect the founding of more startups in the next three years than in the entire previous decade. Certainly, this is only an estimation and real numbers may vary, especially taking into consideration the impact of global economic trends and other factors that could also be significant.

### YEAR OF REGISTRATION



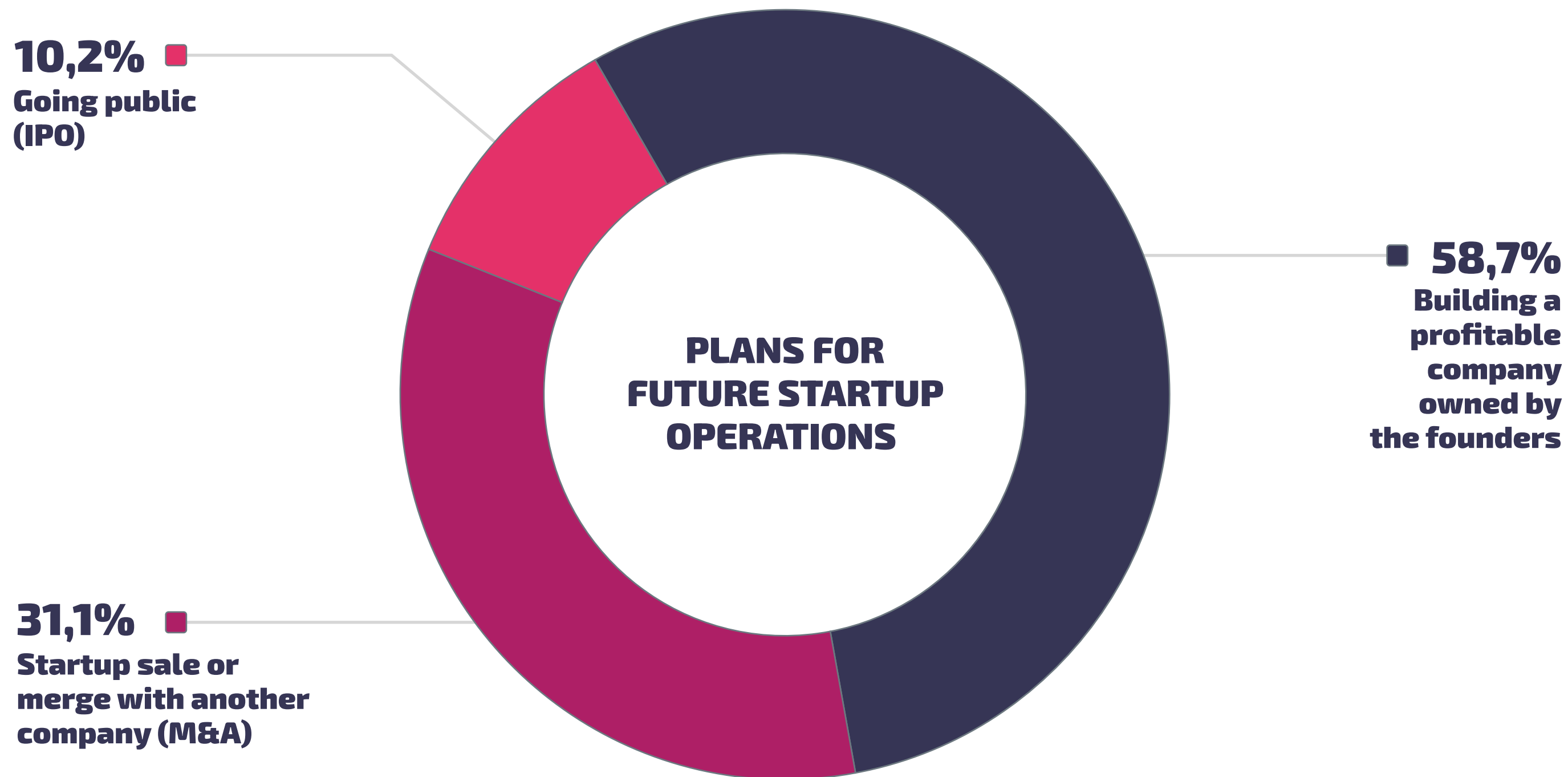
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## PLANS FOR FUTURE STARTUP OPERATION

Over a half of founders (58.7%) aim to build a profitable company, while 31.1% already plan to sell their startup, and only 10.2% plan to go public. We have noticed a change compared to last year's survey when as many as 88% of respondents stated they planned to build a private company owned by the founders. Also, compared to the previous survey, a percentage of startups planning to sell their company rose from 11.9% last year to 31.1% this year. This may indicate that market conditions and circumstances for exit through M&A are improving and it is quite possible that it is the matter of change of perception of founders, where sale of the company is not seen as a failure any more, but a satisfactory way of creating a new value and venturing into new projects.



N= 167;

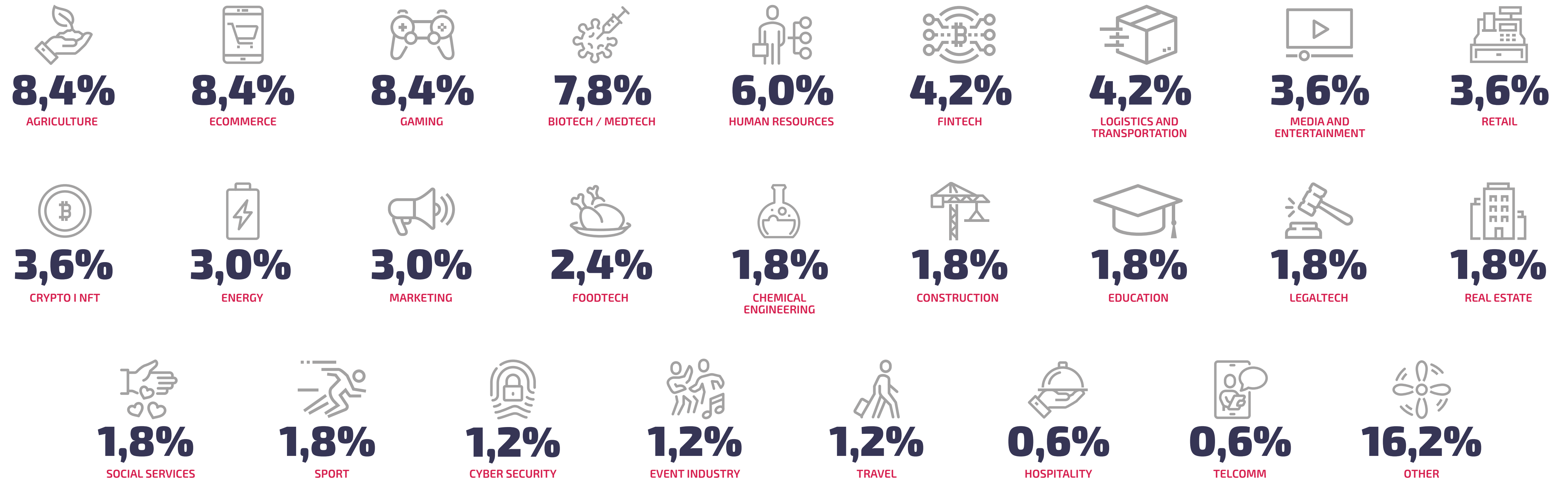


## SECTORS

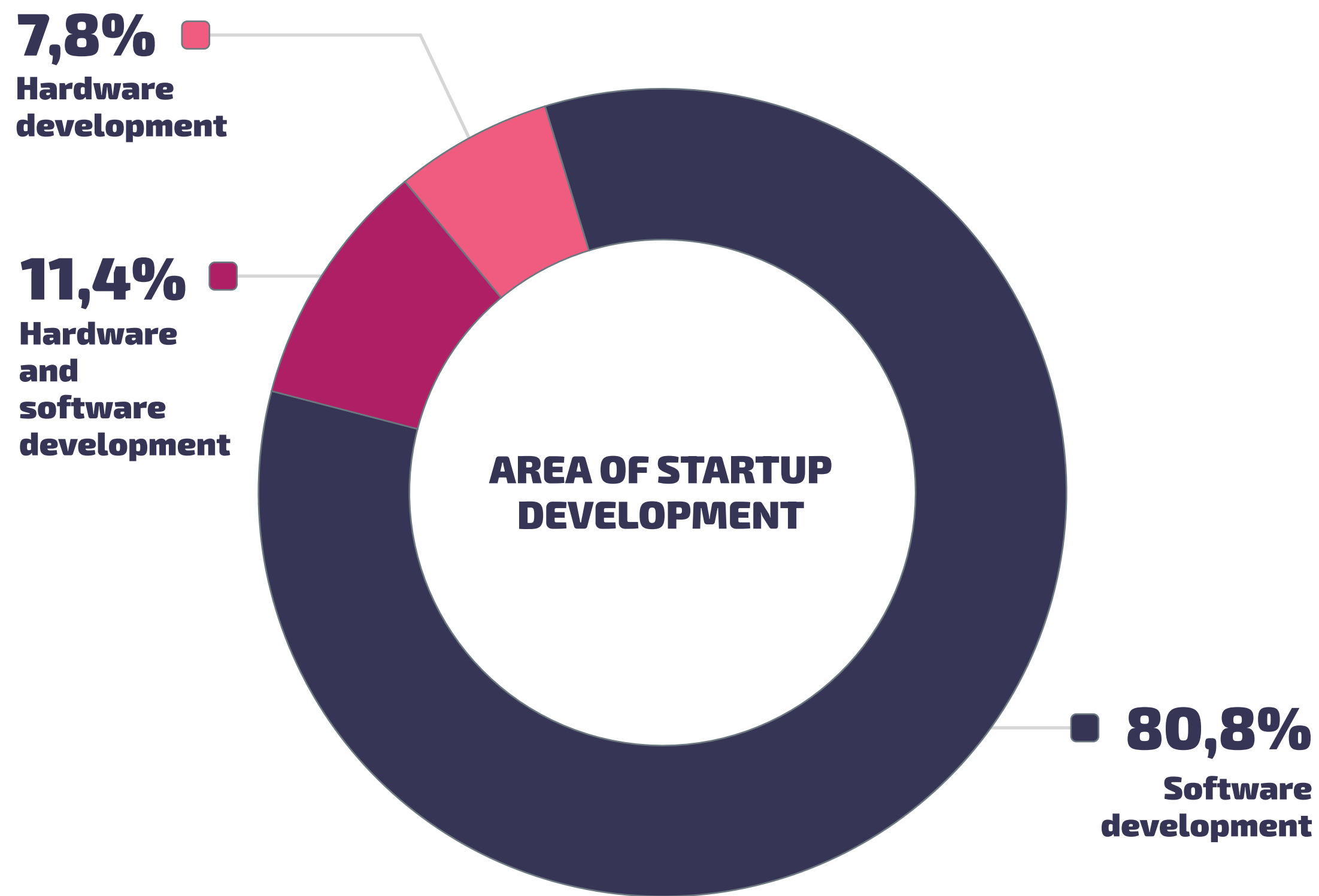
Looking at the startup distribution by industry, one possible conclusion is that startups in agriculture, eCommerce, Biotech/Medtech and gaming make up the largest part of the ecosystem. It is important to note that all the data refer only to startups participating in this survey and that other data sources may show different distribution by industry. Also, the

Startup Scanner 2023 does not address the size of individual markets nor the size of startups in specific industries, but only shows the industries that attracted the largest number of startups participating in this survey.

### INDUSTRY / SECTOR IN WHICH THE STARTUP IS ACTIVE

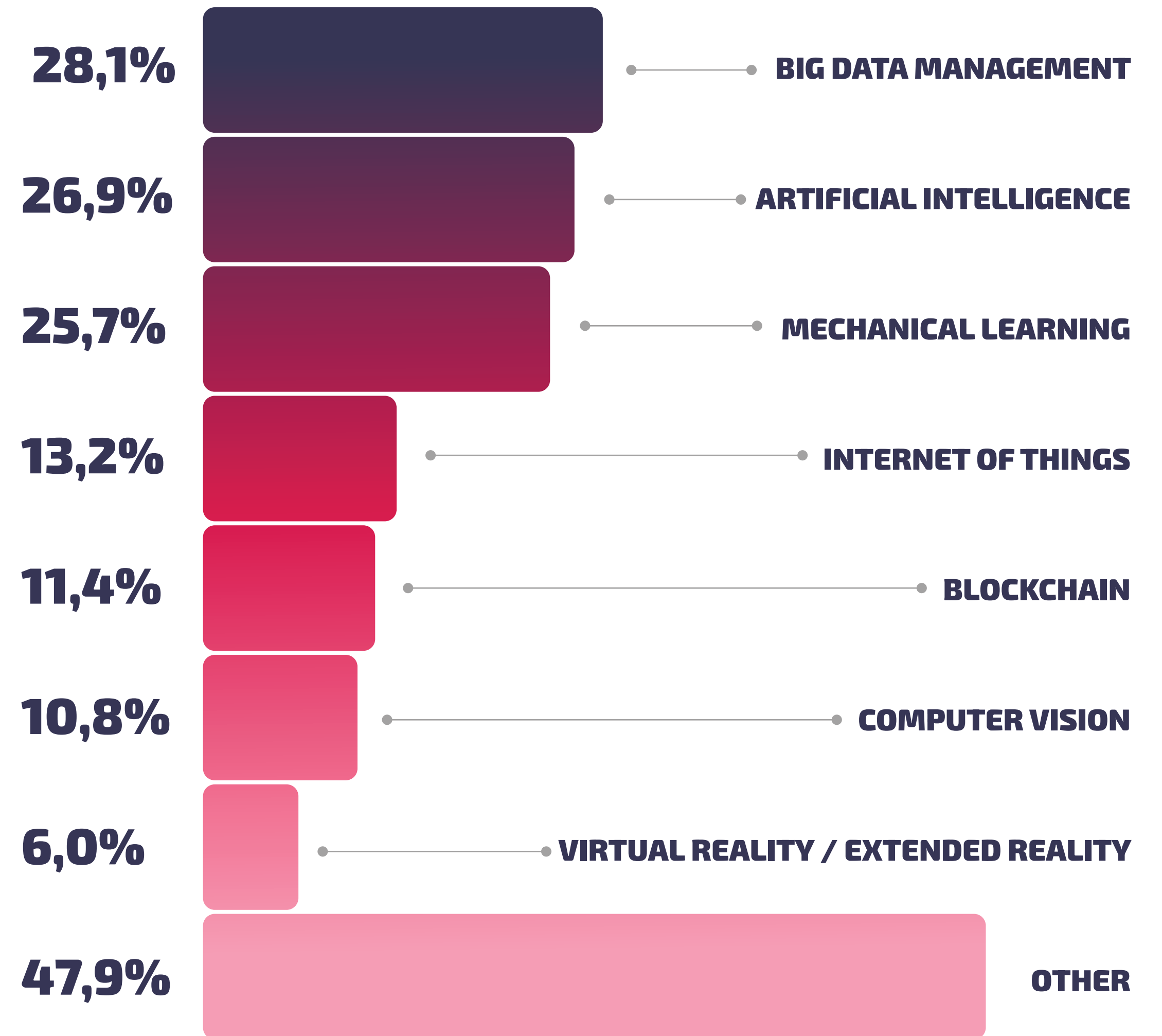


By far, the largest number of startups are active in the area of software development (80.8%), followed by the hardware and software development domain at 11.4% and hardware development domain at 7.8%. If we look at technological fields, the largest share of respondents are developing startups in the field of big data management (28.1%), followed by the field of Artificial Intelligence (26.9%) and Machine Learning (21.9%).



### TECHNOLOGICAL FIELD OF STARTUP DEVELOPMENT

N= 167;



N= 167;

\* Respondents could select multiple answers



## STARTUP MARKETS

Startups place their products and services mainly on the domestic market (58.1%). Although the Serbian market is very small compared to some other markets, bearing in mind that most of our startups are still at the start of their journey, in the stage of MVP development and attracting first customers, domestic market is a natural starting point for PoC, before they engage in expanding

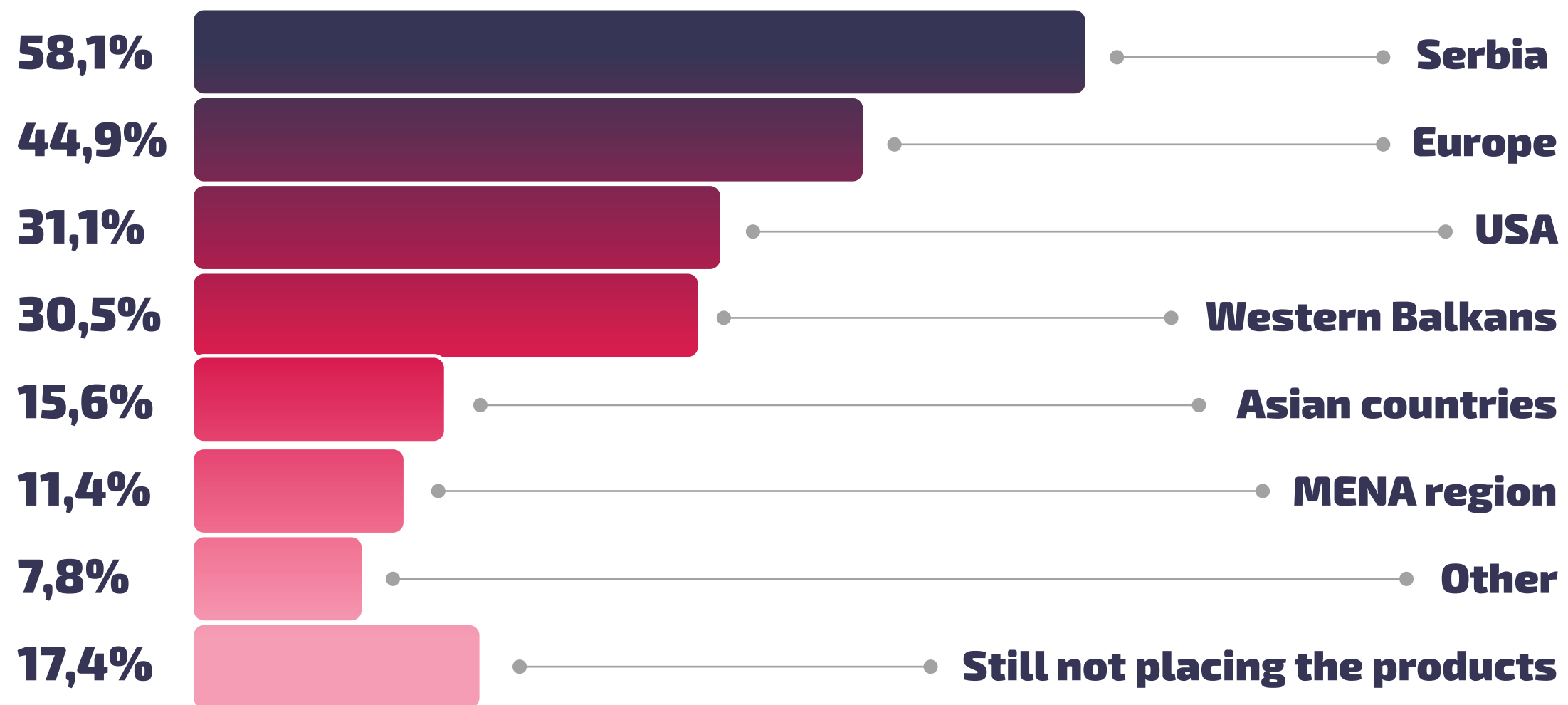
on the international markets, such as Europe and USA. Our research data confirm this, as a considerable number of Serbian startups are already present on the EU market (44.9%) and US market (31.1%), indicating the global orientation of Serbian startups, openness towards international operation and readiness to fight for their place on the more advanced markets.

## DOES YOUR STARTUP PLAN (FURTHER) INTERNATIONALIZATION IN 2023?

N= 167



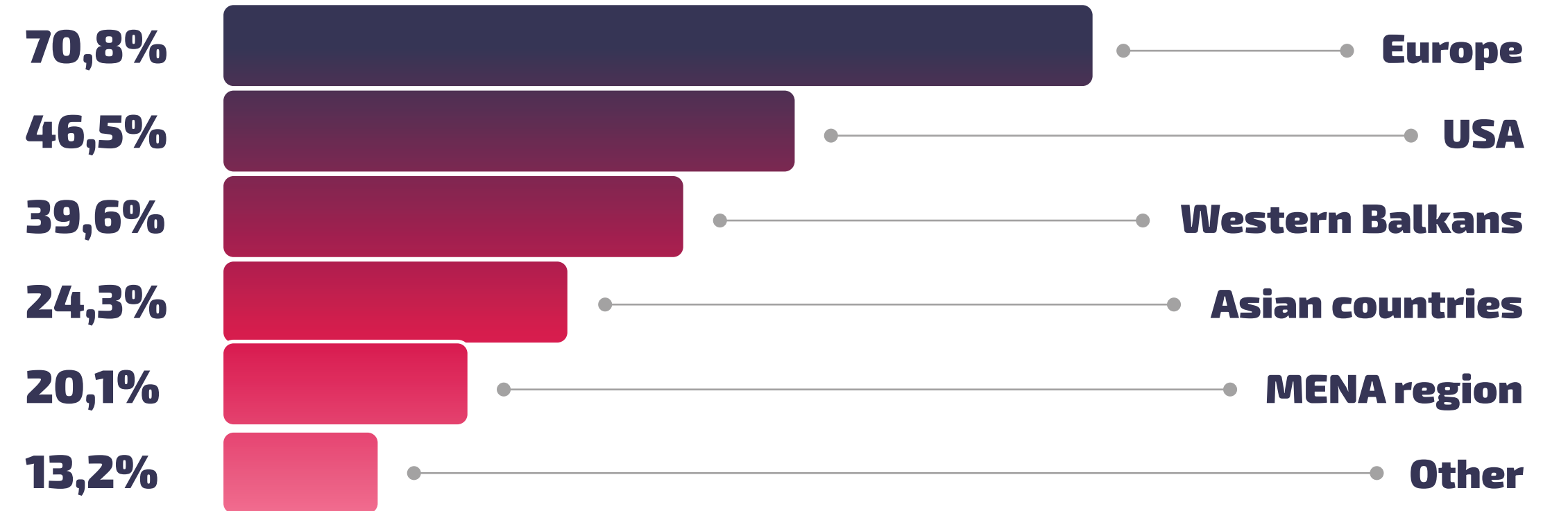
### MARKETS THEY PLACE THEIR PRODUCTS ON



N= 167

\* Respondents could select multiple answers

### MARKETS OF (FURTHER) INTERNATIONALIZATION IN 2023



N= 144;

\* Respondents could select multiple answers



# FOUNDERS AND EMPLOYEES



## HUMAN CAPITAL

The IT sector is experiencing a noticeable shortage of labor force not just in Serbia, but across the globe and the formal education system cannot make up for the lack of expert staff. According to a helloworld.rs<sup>2</sup> survey the number of vacancies in the IT sector increased in 2021 by 65% compared to 2020. This trend continued in 2022 with a growth of 27% compared to 2021, while in certain months there was an increase of 50%+ in job advertisements compared to the same month of the previous year. In absolute numbers, if all 14,000 vacancies could be filled in 2022, the number of employees in the Serbian IT sector would have risen by over 25% in only a year.

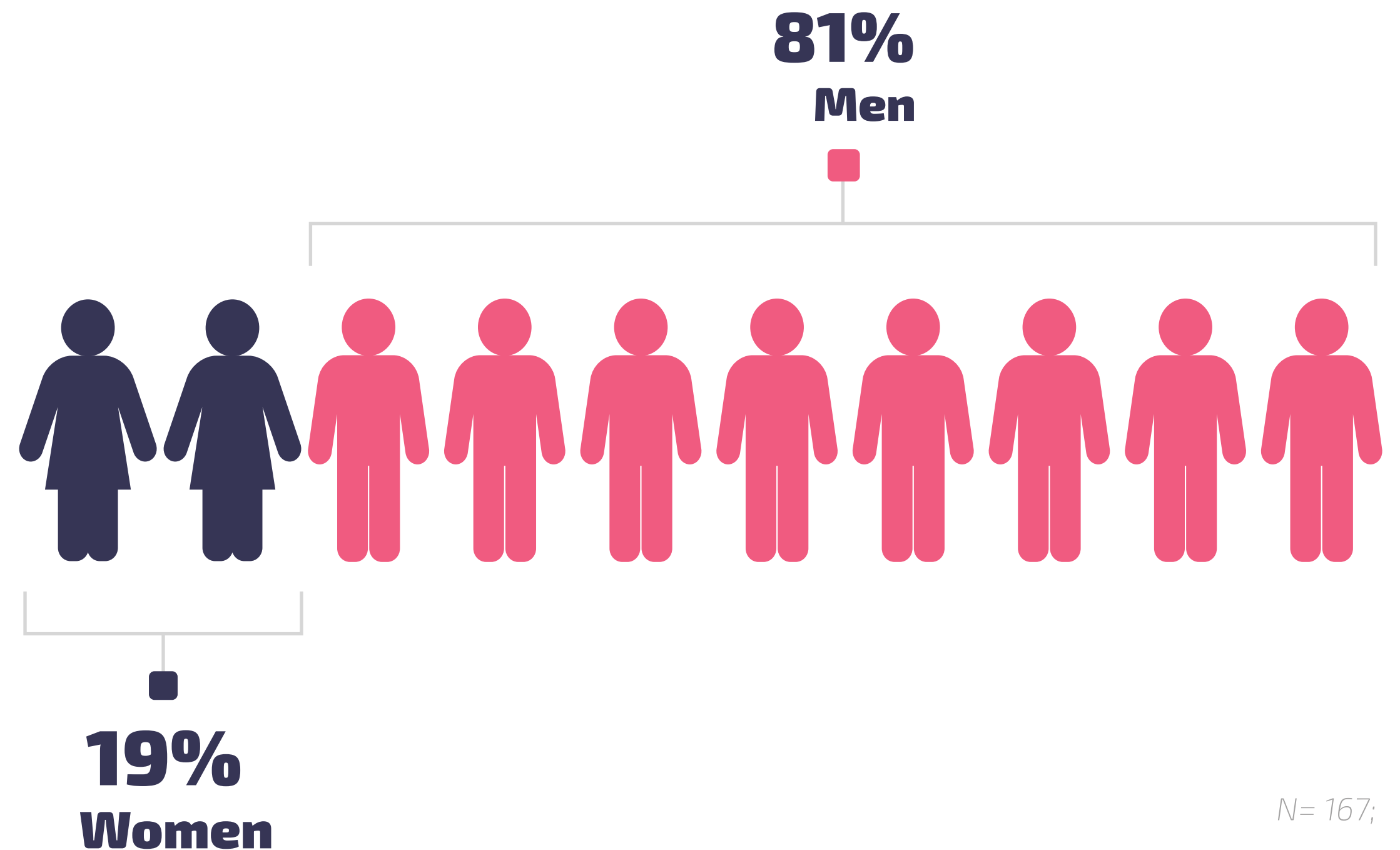
## PROFILE OF FOUNDERS

The Startup Scanner 2023 confirmed the last year's findings that the startup founders in Serbia are mainly men between 30 and 39 years of age, holding a University degree and currently residing in Serbia, who acquired their knowledge relevant for establishing and running the startup, to a large extent, through their previous work experience.

**THE AVERAGE AGE  
OF THE SERBIAN STARTUP  
FOUNDER IS 36.6 YEARS.**

According to the Startup Scanner 2023 findings, men account for 81% of startup founders, while 19% are women. Bearing in mind that European average of female founders is 15.5% and that in the top European ecosystems there are 18% of female founders<sup>3</sup>, we may conclude that Serbia stays ahead of the EU in this domain. Even though the data sound reassuring, there is still an undoubted need for considerably larger involvement of women in the startup ecosystem as well as for creation of support and assistance instruments to contribute to it.

## GENDER OF FOUNDERS



<sup>2</sup> <https://helloworld.rs>

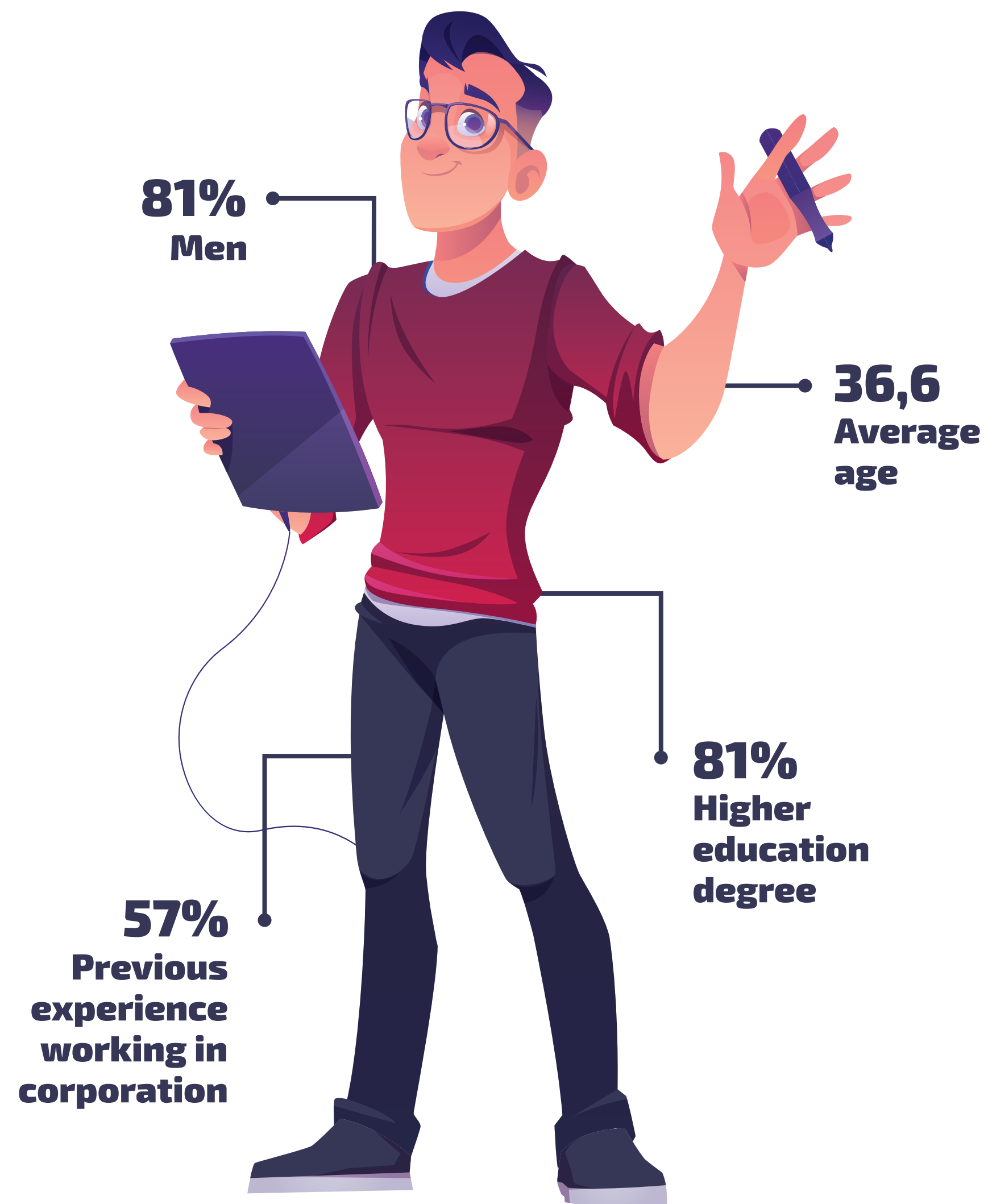
<sup>3</sup> Report on Women Entrepreneurs in Europe, <https://startupsandplaces.com/startup-heatmap-europe-report-on-women-entrepreneurs-in-europe/>

A survey found that 21% of all survey respondents lived abroad part of their lives, before returning back to Serbia. Startup founders who lived abroad and returned to Serbia contribute to the improvement of global connectedness of the ecosystem, connections to potential investors, as well as much easier access to foreign markets and clients. Also, they bring knowledge and

innovations acquired in various developed ecosystems, thus additionally contributing to higher sophistication of ecosystems and enabling Serbian startups to be more competitive at the global level.



N= 167;



**The founders in Serbia are mostly men between the ages of 30 and 39 with a university degree and current residence in Serbia, who have acquired most of their previous experience by working in corporations.**



## PROFILE OF EMPLOYEES

By creating innovative ideas, products, business models, multidisciplinary teams, but also by internationalizing and establishing global connections, startups initiate much more than economic changes. They create new jobs, innovative products and establish connections between science and the private sector. We asked founders not only about their current and planned number of employees, their age and gender, but also to consider key challenges and employment plans for new team members.

### GENDER STRUCTURE OF EMPLOYEES

**68,9% Men**

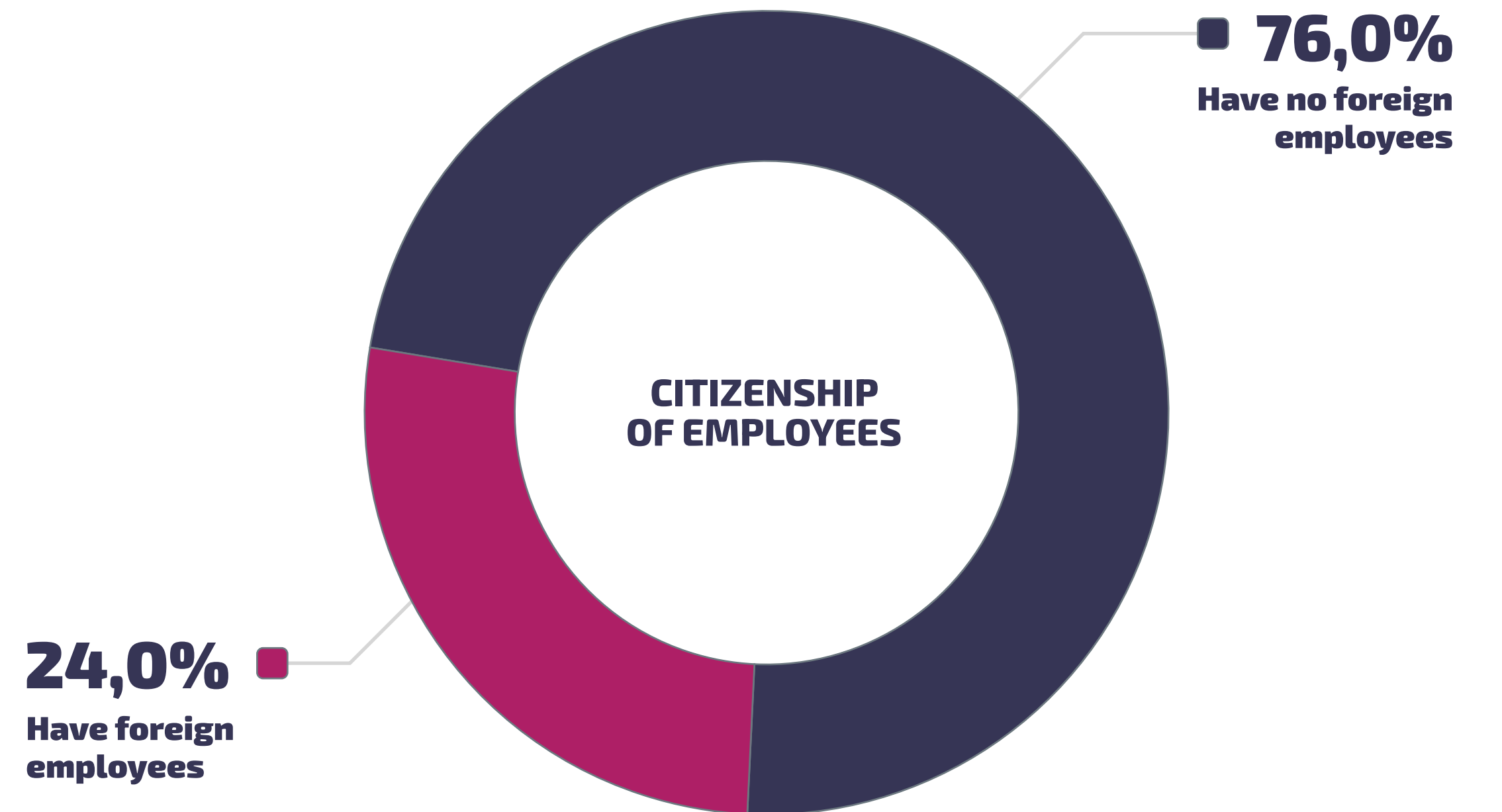


**Women 31,1%**

N= 167;

## CITIZENSHIP OF EMPLOYEES

When asked whether there were foreigners among their employees 24% of startup respondents answered that they have foreign employees. The increased number of expats and foreigners in the startup ecosystem can be valuable for further development. A service or product developed by the international team has a better chance to be globally competitive and attract customers from various parts of the world.



N= 167;

## EMPLOYMENT

Out of 167 surveyed startups 61.7% (total of 103) hired 585 new employees in 2022. At the time of the survey, the surveyed startups planned to hire on average 5.7 new team members in the following 12 months, i.e. to create about 958 new jobs primarily intended for highly educated, young people. Considering that this survey included only a part of the Serbian startup ecosystem, which is currently estimated at over 600 startups, we may conclude that the ecosystem generally hired over 2,000 employees in 2022, and plans to create more than 3,000 new jobs next year.

The fact that a significant majority tends to hire single digits employees is in line with the level of startup ecosystem development and development level of the largest number of local startups.

## NEW EMPLOYEES IN THE NEXT 12 MONTHS



**96,4% Plan**

**Do not plan 3,6%**



# COOPERATION AND CONNECTION



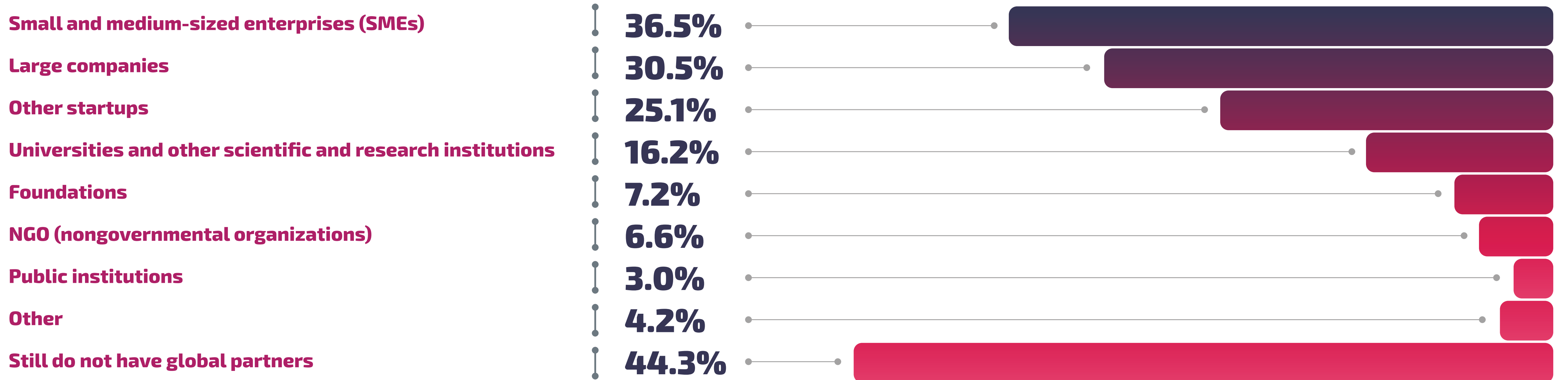


## GLOBAL CONNECTEDNESS

Survey results showed that almost half of startups do not collaborate with global partners yet (44.3%). Given that the majority of startups are in the early stage of development, such results are not surprising. However, taking into account that the majority of startups aspire to further

internationalization, the need for stronger global connections both of startups and the entire ecosystem is obvious.

## GLOBAL PARTNERS STRUCTURE



N= 93;

\* Respondents could select multiple answers

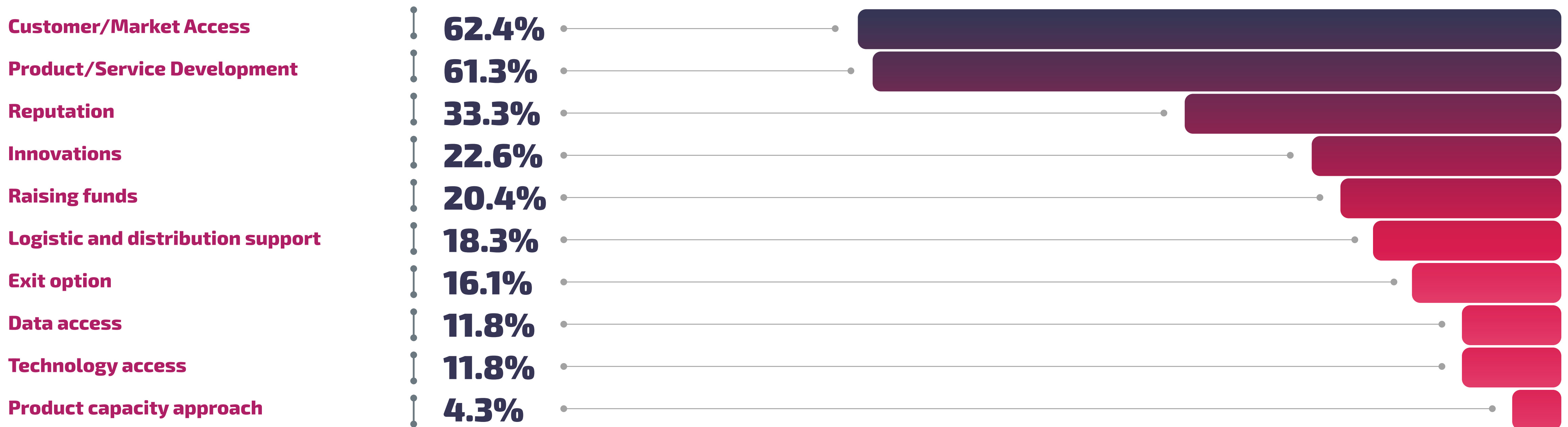




Regarding cooperation goals with major global partners, startups mainly selected goals related to access to customers and markets (62.4%), product development (61.3%), reputation (33.3%), innovations (22.6%) and fundraising (20.4%). Other goals account for less than 20%.

By comparing results of global cooperation goals and goals particularly important for startups, it is evident that product development and sales increase are of primary importance for them.

### GOALS OF GLOBAL COOPERATION



\* Respondents could select multiple answers

N= 93;

# FINANCING AND BUSINESS

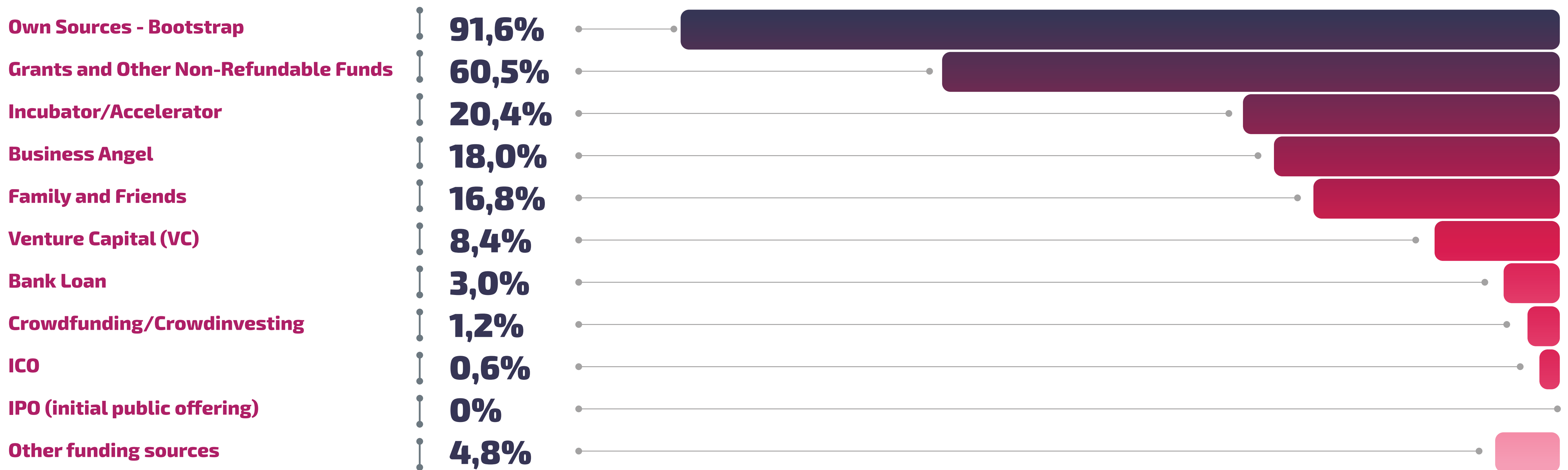


## FUNDING AND OPERATION

In the context of startup development, financial capital can be seen through two dimensions - the source of initial financial capital and how successfully the startup generates financial capital. Startup success and ecosystem development are closely tied to possibilities for access to finance. It is particularly important to ensure funding as soon as possible<sup>4</sup> in the early stage of startup development.

Overall results indicate lower maturity of ecosystems and need for developing new funding sources to encourage startup growth and development. The data clearly show that the majority of startups have been at least partially bootstrapped (91.6%) i.e., due to the limited access to capital, founders often financed the start of operation on their own. Grants and other non-refundable funds make up the second most-common method of funding (60.5%), while incubators and accelerators (20.4%) and business angels (18%) are ranked third and fourth. These sources of the so-called "smart money", in addition to money, provide professional assistance in the form of mentorship, education and connection with partners, both local and global.

### SOURCES OF FUNDING



<sup>4</sup>Startup Scanner 2019, How are startups doing in Serbia?, Digital Serbia Initiative, page 61

\* Respondents could select multiple answers

N= 167;



The data show that the majority of startups did not receive a considerable amount of external capital. A significant share of startups (40.1% or 67 startups) has not received any external investment so far, followed by those who received between EUR 10,000 and 50,000 (14.4%).

Overall, the results indicate challenges the Serbian startup ecosystem faces in access to capital and attracting external investments.

### EXTERNAL INVESTMENTS



\* Respondents could select multiple answers

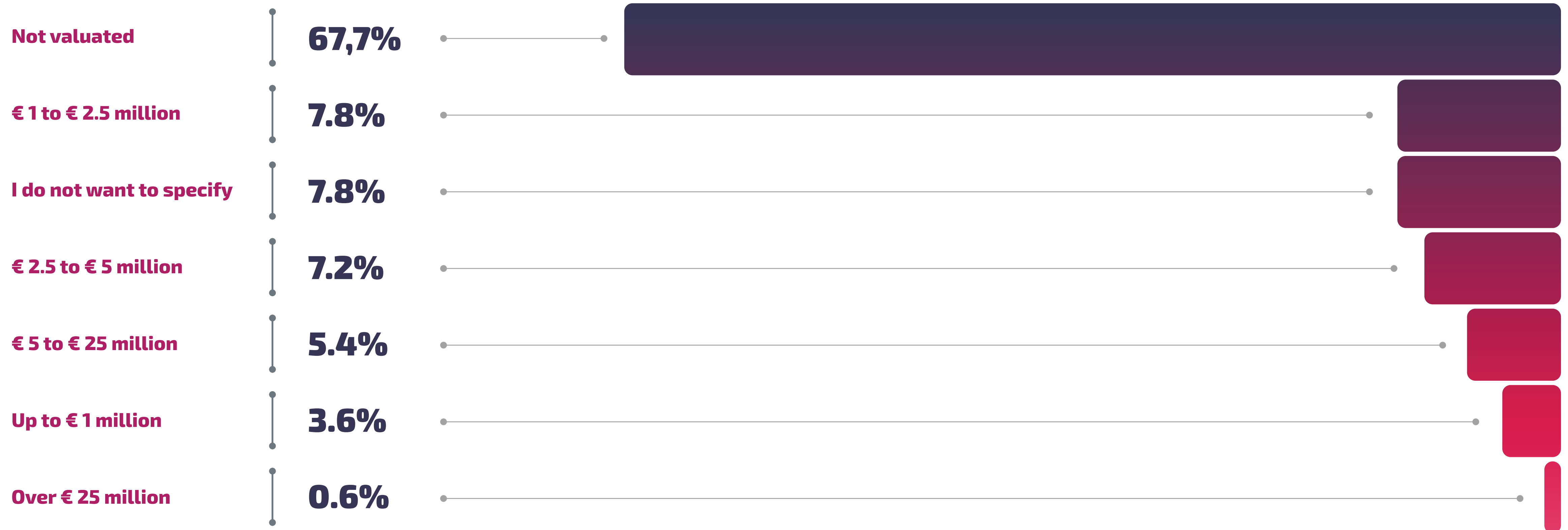




Startup valuation is one of the most challenging steps in securing funding, given the versatility and complexity of methods used. Also, startups often refrain from declaring their valuation, so the ecosystem value can be only assessed but not determined. The value of over two thirds of

startups in Serbia has not been valued at all (67.7%), while one fourth of startups (25.6%) responded that their value has been estimated at €1 million or more.

### VALUATION IN THE LAST ROUND OF FINANCING



N=167;



Throughout 2023, the largest share of startups plan to raise between 300,000 EUR and 500,000 EUR (18.6%). On the other hand, the same number of startups have no plans for funding rounds in the next 12 months. In total, startups plan to raise more capital in the next year than sum of

what they have managed to raise so far. As stated earlier this is indicating that Serbian startup ecosystem is rapidly growing and startups are getting more ambitious and eager to try various forms of fundraising to achieve their goals.

### FUNDING PLAN FOR 2023



\* Respondents could select multiple answers

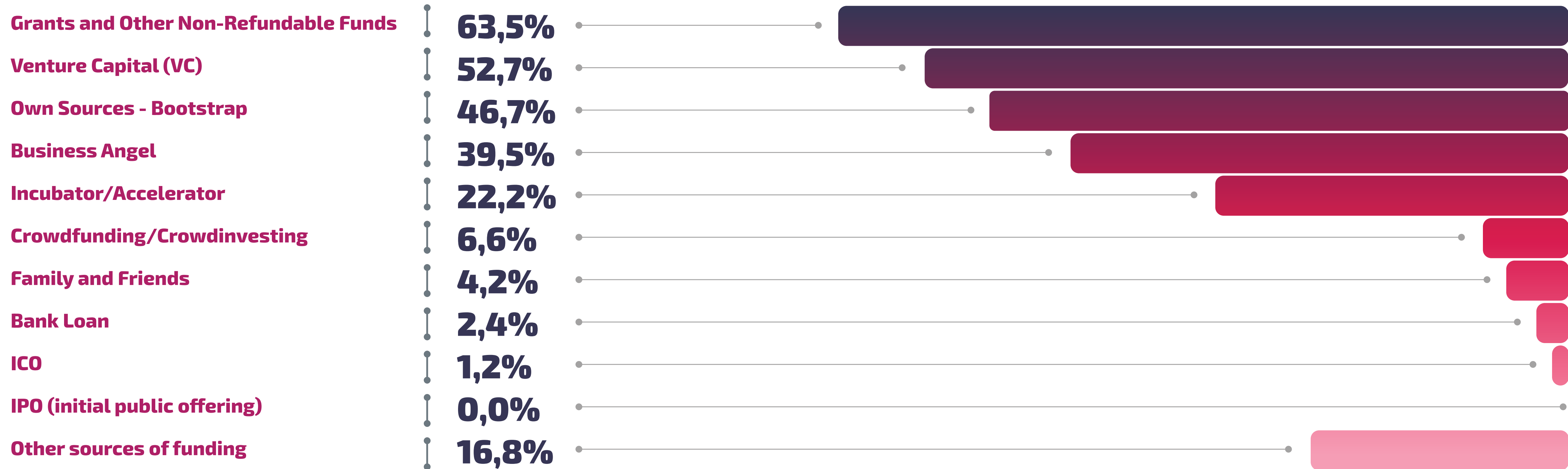
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Regarding the sources from which startups plan to raise their capital during next year, data show that the largest share of startups hopes for getting funding from grants (63.5%) and venture capital funds (52.7%). A lesser share relies, in their plans, on sources such as their own

funds (46.7%) and business angels (39.5%), incubators/accelerators (22.2%). Other sources of capital are less present in plans for the next year.

**PLANNED SOURCES OF CAPITAL FOR 2023**



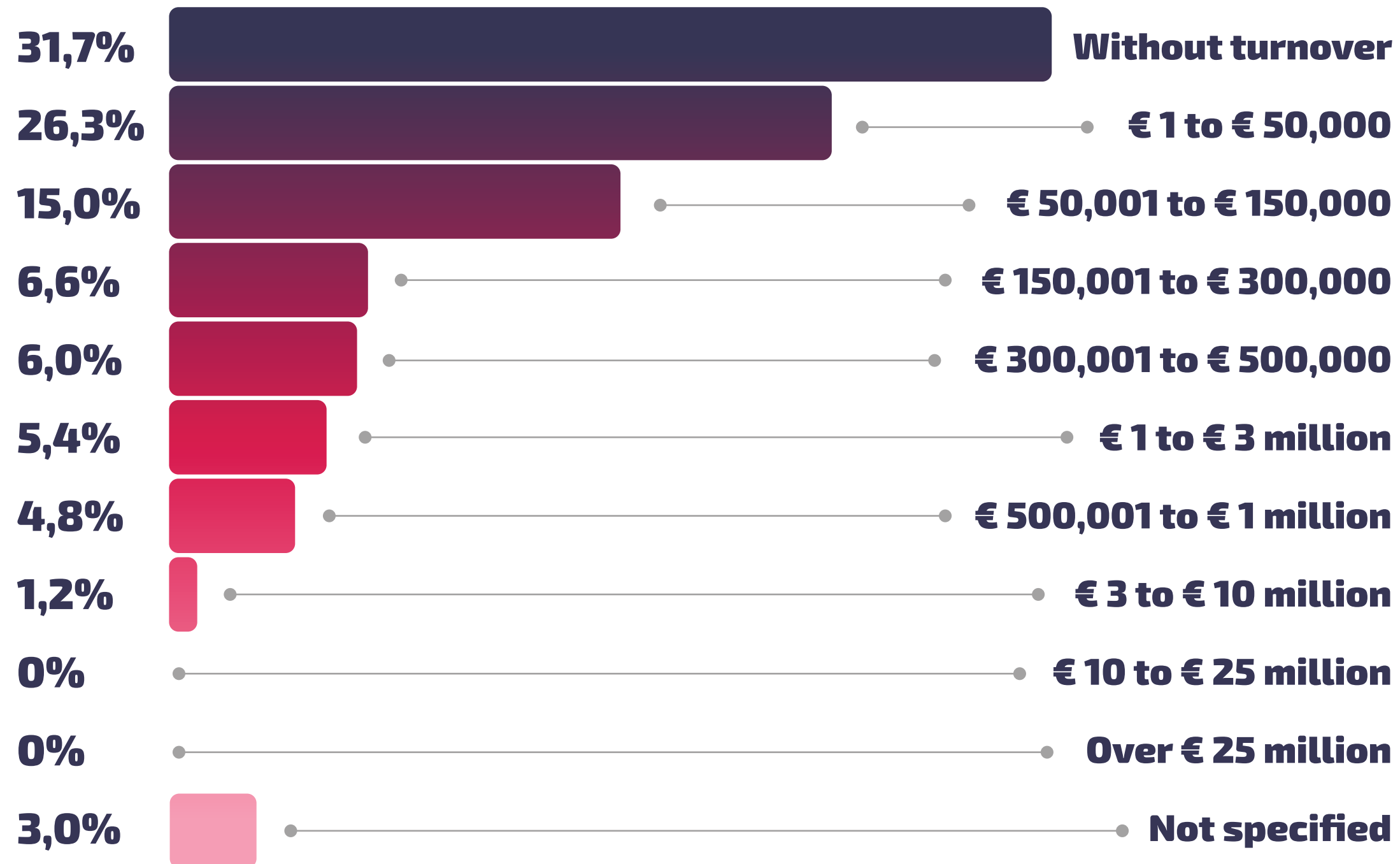
\* Respondents could select multiple answers

N= 167;

**SALES**

In most cases, startups face challenges of generating first income and achieving profitability, therefore it is not a surprise that a considerable part of startups (31.7%) worked without generating revenue. However, it can be noted that it is by over 10% less than in the previous year, when 43% startups did not generate a revenue. Those generating revenue, mainly did so up to EUR 50,000 (26.3%). Regarding profitability, about two thirds of startups (65.2%) stated that they are not profitable, while the rest stated that they are either profitable (18.0%) or breakeven (16.8%).

**TURNOVER IN THE PREVIOUS FISCAL YEAR**

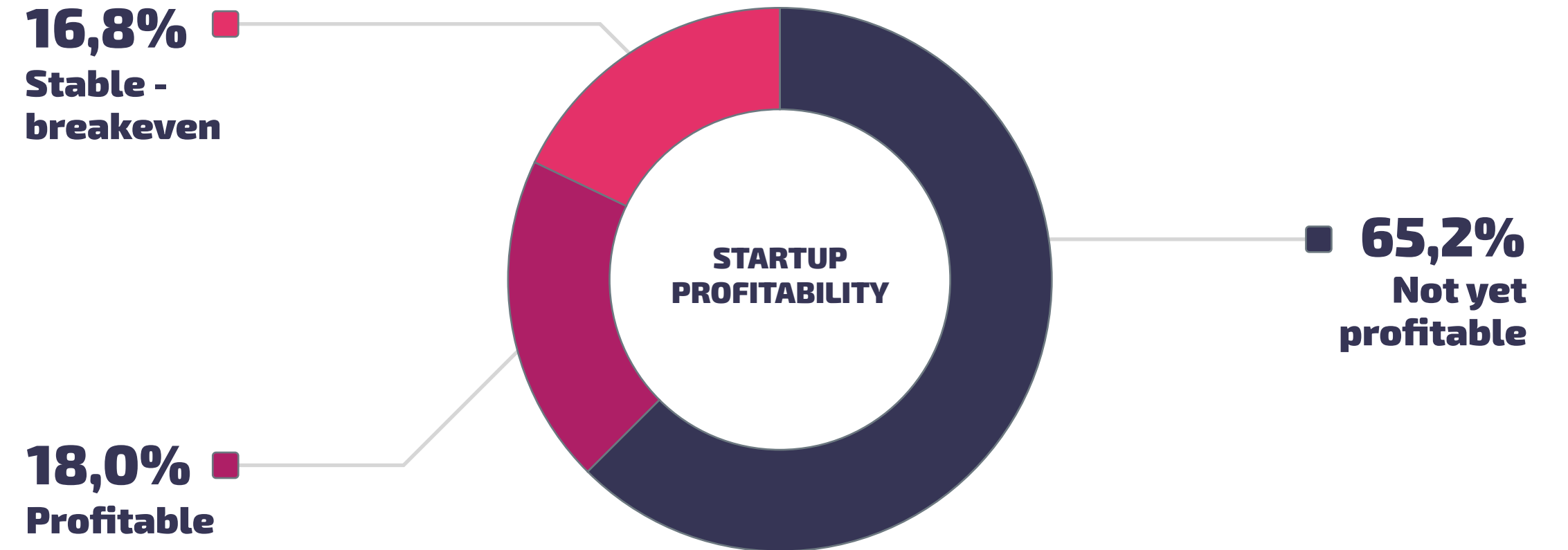


\* Respondents could select multiple answers

N= 167;

**16,8%**  
Stable -  
breakeven

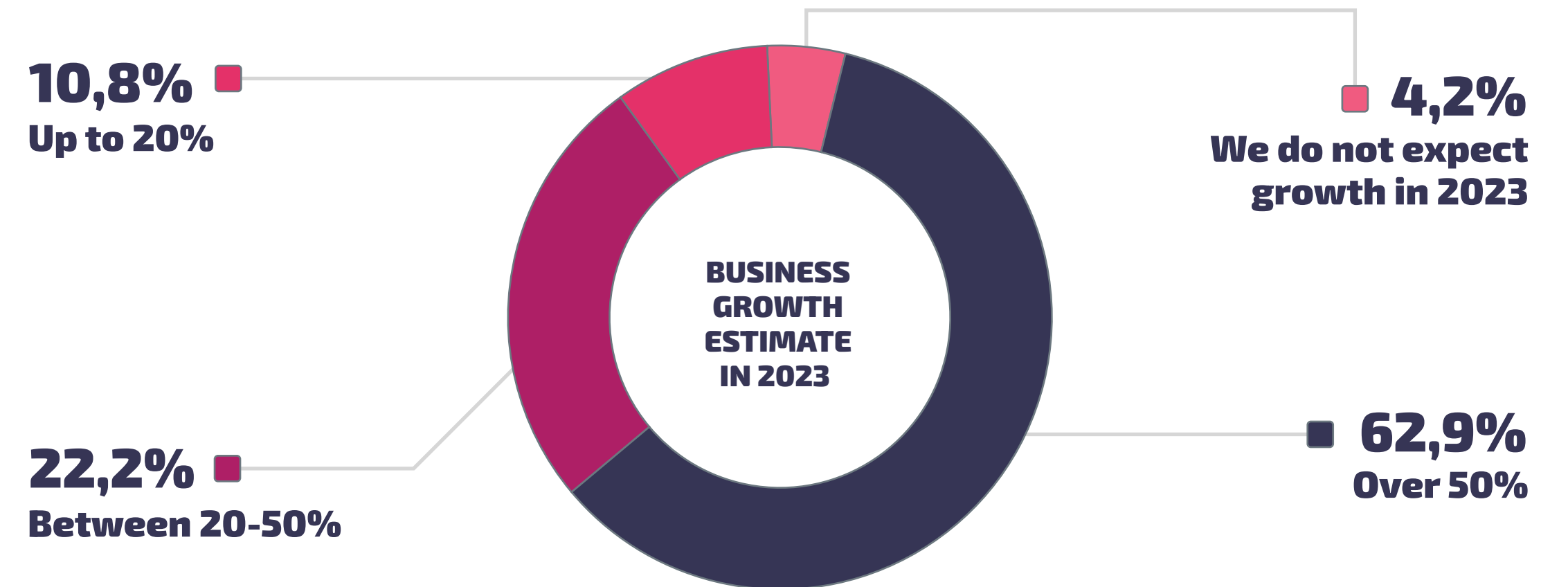
**18,0%**  
Profitable



Over a half of startups (62.9%) estimate that they will achieve 50% growth in 2023, while a little less than a quarter expect to record the growth between 20% and 50%. The share of startups which plan to grow below 20% is 10.8%, while only 4.2% estimate that they will not achieve any growth next year. Compared to 2022, when these estimates were somewhat in discrepancy with what really happened - i.e., 55% of startups were planning a business growth larger than 50%, but only 11.3% said they plan to hire new team members for Sales - this year, we can see that, throughout the research data, there is an increased focus on development, sales and marketing.

**10,8%**  
Up to 20%

**22,2%**  
Between 20-50%



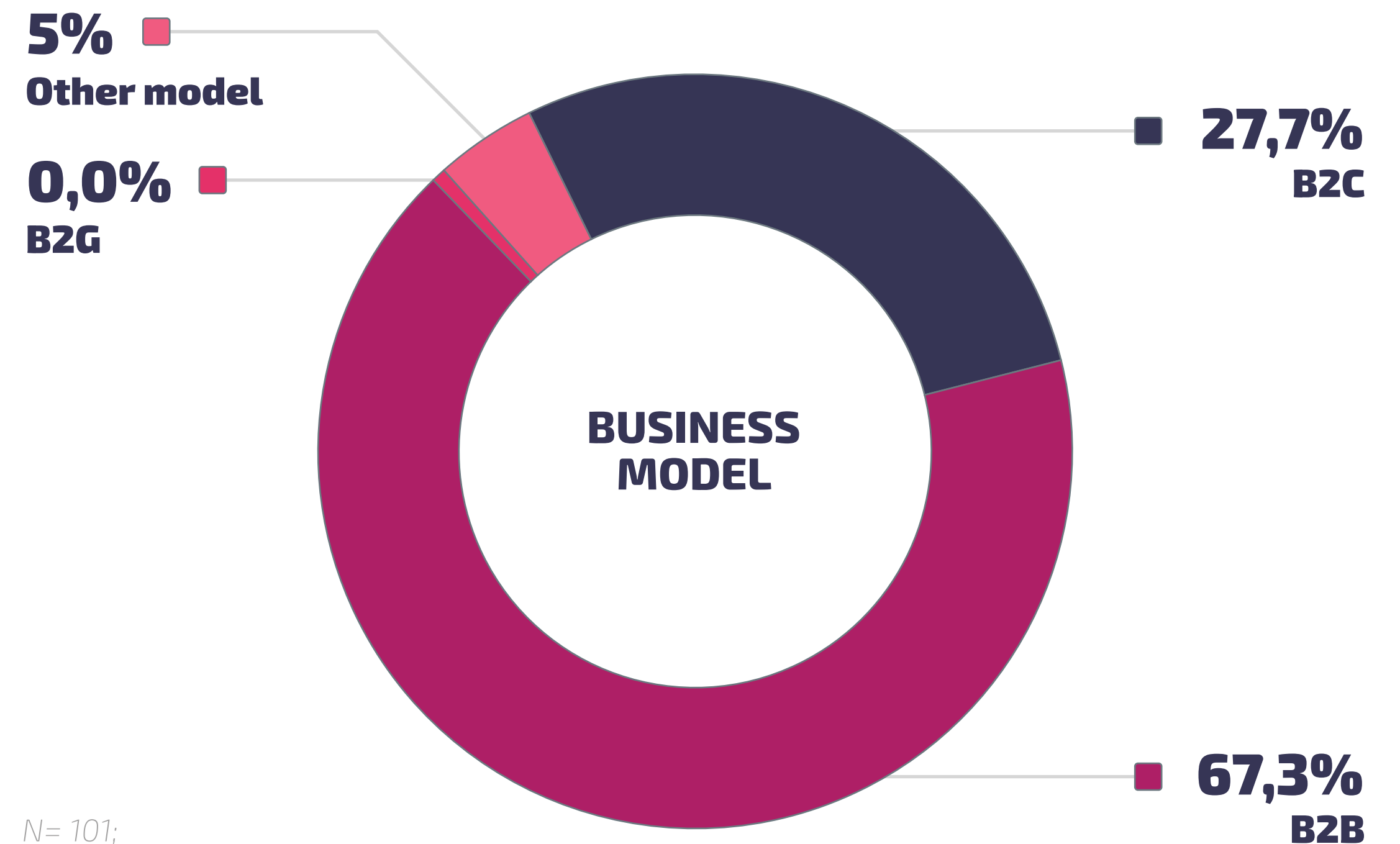


## BUSINESS MODEL

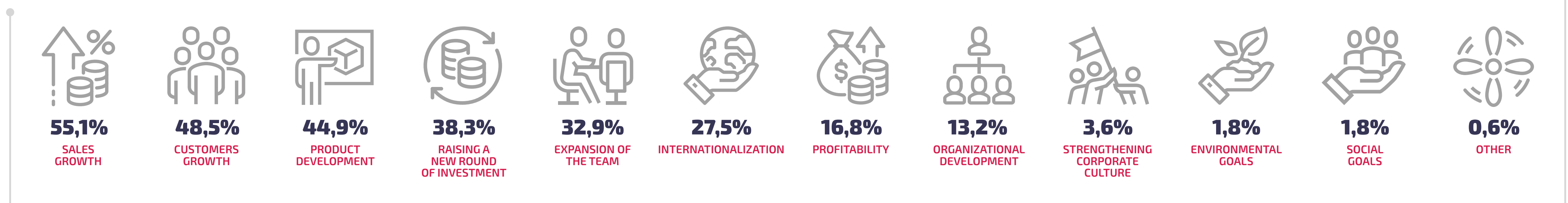
The most common business model is B2B — business to business (67.3%), followed by B2C — business to customer (27.7%). None of the startups has selected option B2G - business to government, and very rarely the option "other models". Bearing in mind that the largest percentage of founders stated their previous work experience came from working in a corporation, it is not surprising that startups' clients are most often other businesses.

## GOALS

In order to gain a better understanding of the present status of startups and how to support their development, the research looked into startups developmental priorities. The distribution of responses to a question concerning what goals are particularly important for startups showed that they mainly refer to sales growth (55.1%), customer growth (48.5%), product development (44.9%) and raising a new round of investment (38.3%), followed by expansion of a team, internationalization and profitability. These results are in line with the fact that the majority of startups participating in a survey are at the stage of MVP development and attracting first customers.



## IMPORTANCE OF GOALS



\* Respondents could select multiple answers

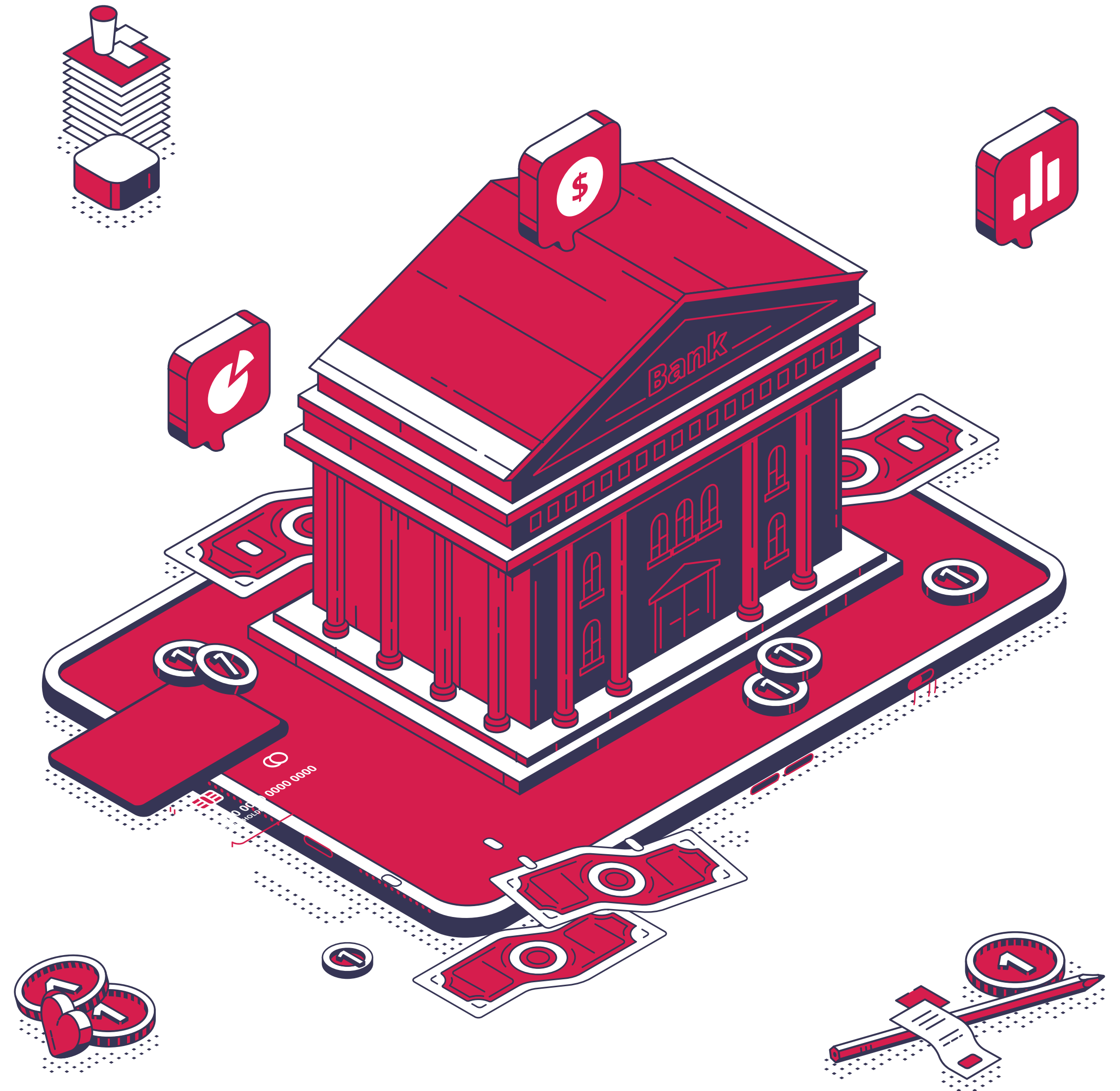
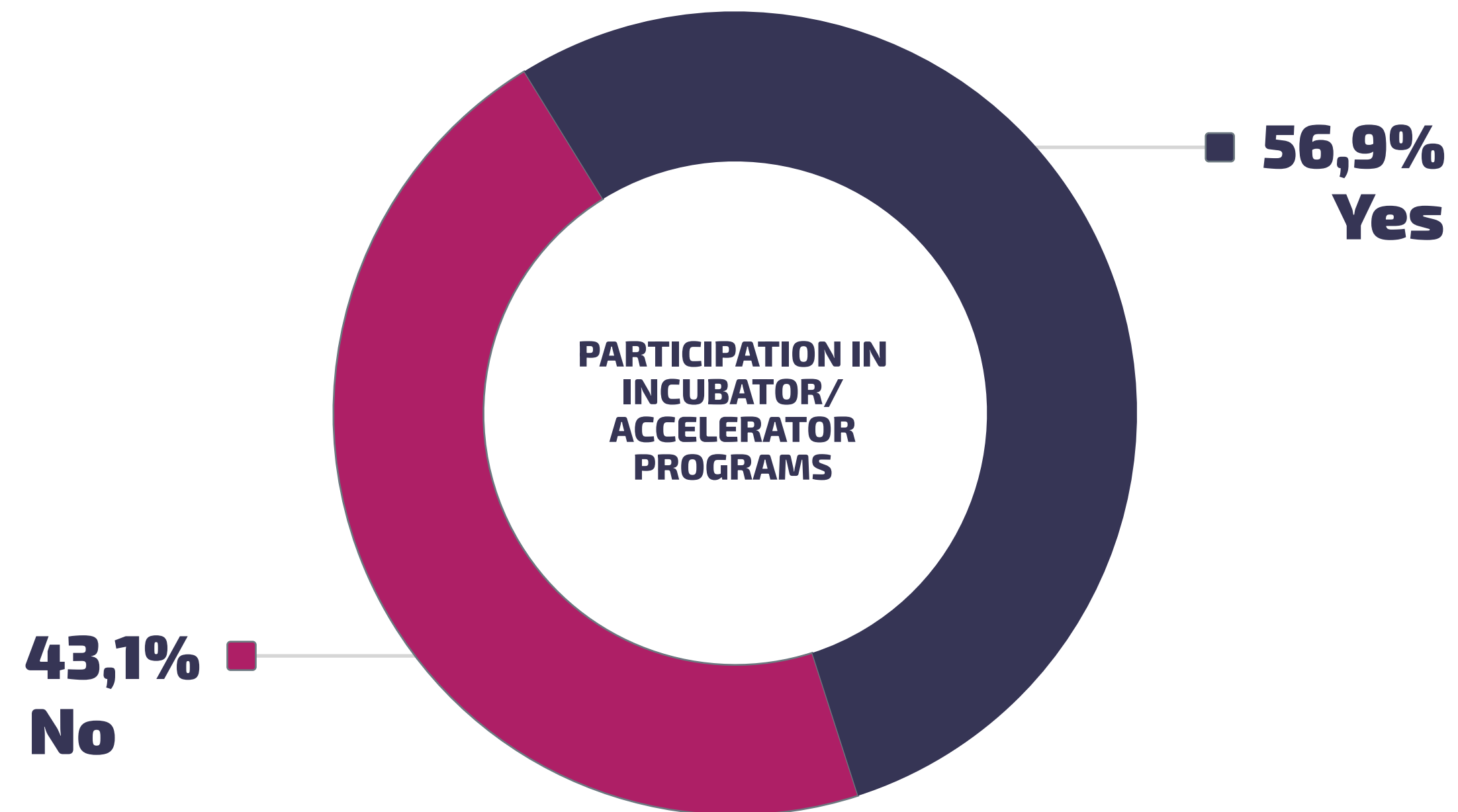
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# STARTUP SUPPORT SYSTEM



## SUPPORT ORGANIZATIONS, INCUBATORS, ACCELERATORS

Startup support organizations and incubators have played a significant role, after informal social networks, in startup founding and development. Over a half of startups participated, at least, in one incubation or acceleration program (56.9%). Also, startup incubators and accelerators are among the first five sources that startups plan to raise capital from in the next year.



## PUBLIC POLICIES AND LEGAL REGULATION — CREATION OF A FAVORABLE ENVIRONMENT FOR STARTUP ECOSYSTEM DEVELOPMENT AND OPERATION

The survey showed all the expectations from the public policies and legal regulations relevant for innovative entrepreneurial endeavors. Far more common expectations refer to tax relief (68.3%), new form of founding, i.e. organizing a startup (38.9%) and necessity of quicker adjustment of regulations and laws to new business models (37.7%).

### EXPECTATIONS FROM PUBLIC POLICIES AND LEGAL REGULATION



It should be underlined that the Startup community starts a new year of implementation of The Strategy for the Development of Startup Ecosystem of the Republic of Serbia for the period from 2021 to 2025, the most important strategic document for local startups, whose implementation DSI and its partners have been involved in. In addition to the adoption of the set of tax reliefs in December 2021, new tax reliefs are about to be introduced, the most important being angel investors investing directly in startups, as well as incentives for legal entities, which invest in the venture capital funds.

The good news is that this year new models of taxation have been finally introduced for freelancers-natural persons who earn income based on an agreed fee, pay taxes through self-assessment and can choose one out of two models, depending on their income.

The DSI, also, continues to make an effort to improve the startup funding framework, where convertible loan funding and SAFE agreement (Simple Agreement for Future Equity) are one of the priorities. Additional relief for angel investors comes from the new rules regarding special funds that would facilitate and accelerate investment in startups by a large number of investors.

Regarding the key issue mentioned by startup founders, the restrictions imposed by the Foreign Exchange Operations Act, the DSI has advocated and will continue advocating publicly liberalization and simplification of this regulation.

Also, other DSI goals and plans in the regulatory area are aligned with declared needs of the startup community which can count on support of this organization in the future.



# CHALLENGES FOR STARTUPS IN SERBIA

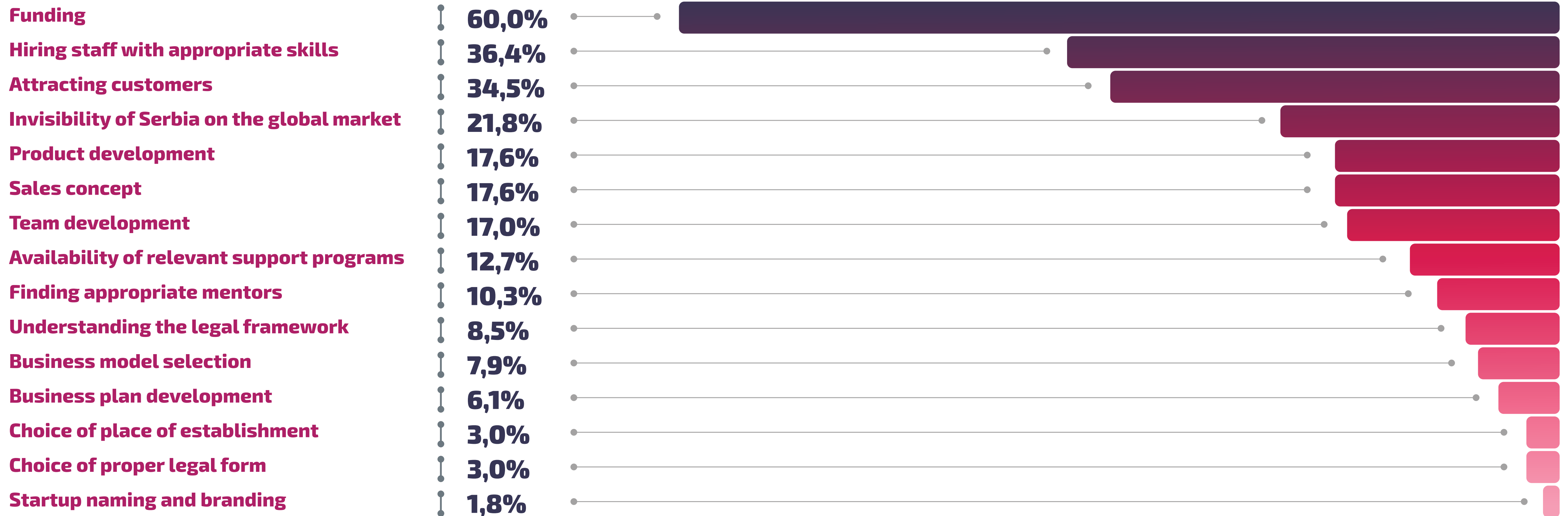


## STARTUP CHALLENGES IN SERBIA

Given that startups are new teams developing innovative solutions or services, it is evident that there are many challenges they face on a daily basis. Moreover, the startup culture in Serbia is in the process of development/emerging/evolving and thus the lack of collective experience and knowledge make challenges more difficult to overcome. Three key challenges in 2023 are

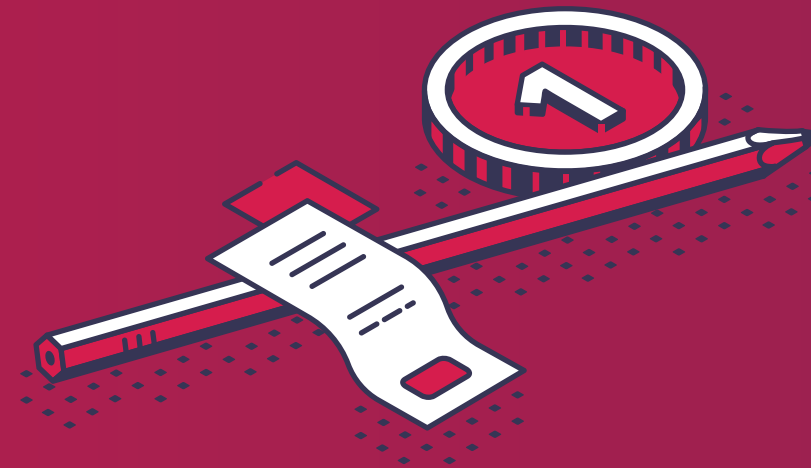
funding (60.0% of surveyed startups), hiring staff with appropriate knowledge and skills (36.4%) and attracting customers (34.5%). It is worth noting that the same challenges were also presented in Startup Scanner 2022. Furthermore insufficient visibility of Serbia on the global market appears to be a relevant challenge according to responses given by 21.8% respondents. Deeper understanding of the challenges enables development of the startup support programs better aligned with the current startup needs, and consequently, more rapid development of the ecosystem.

### MAJOR CHALLENGES



\* Respondents could select multiple answers

# MACROECONOMIC INDICATORS





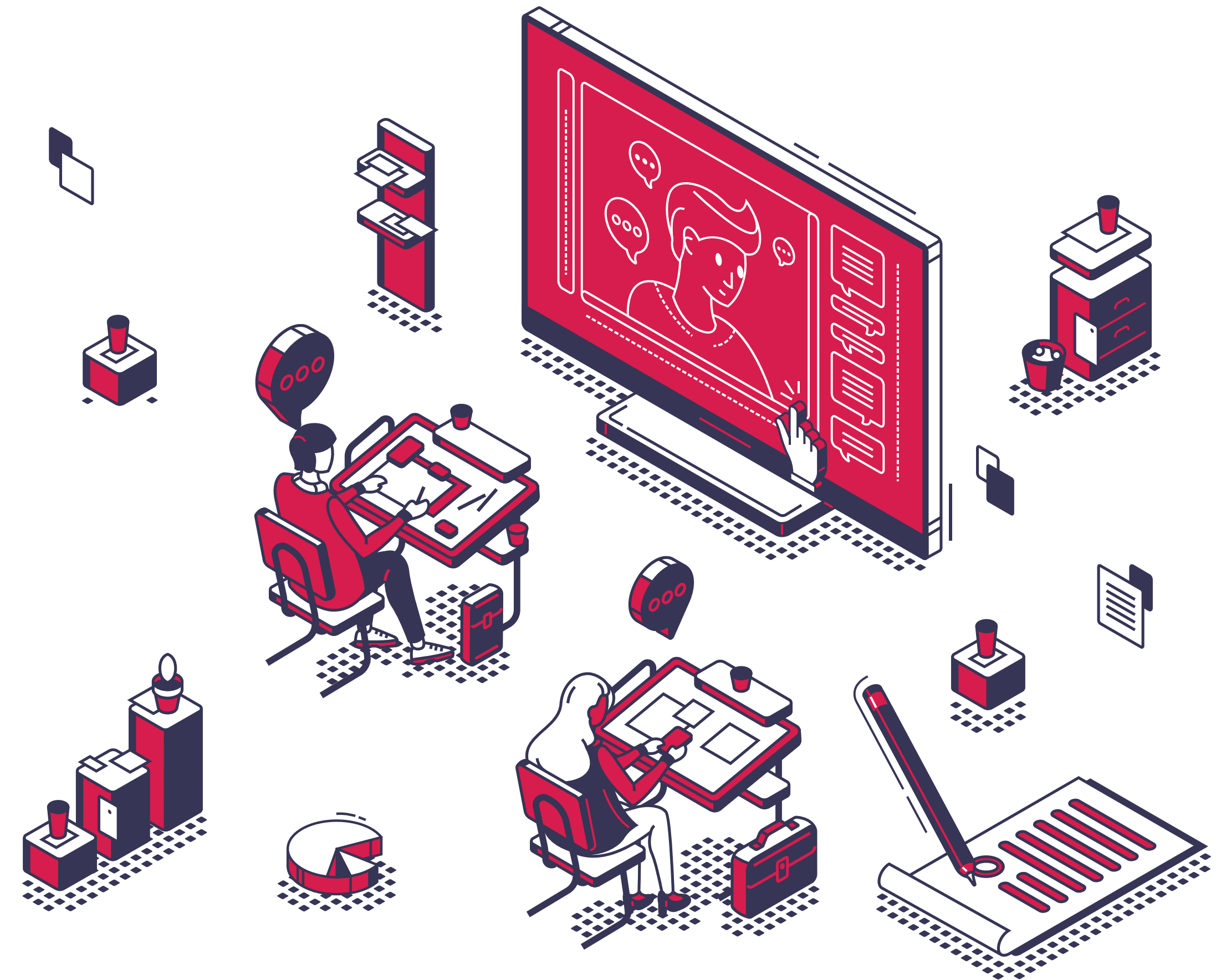
## SERBIA – MACROECONOMIC INDICATORS

According to the first 2022 census of population, there are 6,690,887 citizens<sup>5</sup> living in Serbia, almost half a million of citizens less than a decade ago.<sup>6</sup>

According to the flash estimate of the Republic Statistical Office (RSZ), the real GDP for the fourth quarter of 2022 has recorded growth by 0.4% compared to the same period of the previous year.<sup>7</sup> The goods and services export was valued for the period January-December 2022 at USD 39.9 (growth of 17.18% compared to the same period of the previous year) according to the data of the National Bank of Serbia (NBS), and import was valued at USD 47.4 billion.<sup>8</sup> The international trade deficit in goods and services was at USD 7.5 billion.

The value of Serbia's export of ICT services reached USD 2.69 billion between January and December 2022, making an increase by 45 % compared to the same period last year. The import of services in the same field was valued at USD 680 million.<sup>9</sup> Interestingly the 2022 export of other business services through research and development reached the value of USD 200 million (annual growth by 24.2%), while the import value was at USD 67 million. Major markets of ICT services are USA, UK, Switzerland and Germany.<sup>10</sup>

The average monthly net salary in Serbia for November 2022 amounted to RSD 78,326 (USD 719), while a half of employees (median salary) had a net salary up to RSD 59,580 (547 USD) in November.<sup>11</sup> The average net salary in the field of computer programming, consulting and related activities was RSD 242,933 (USD 2,230) or 3.1 times higher than the average and 4 times higher than the median net salary in Serbia. The Pulse of Serbian IT Community survey conducted in 2022 based on its sample determined that the average salary in the IT sector is EUR 1,600, and that 10% of employees earn over three thousand euros.<sup>12</sup>



<sup>5</sup> The first results of the 2022 Census of Population, Households and Dwellings. Announcement of the Republic Statistical Office, 21.12.2022.

<https://publikacije.stat.gov.rs/G2022/Html/G20221350.html>

<sup>6</sup> <https://www.stat.gov.rs/sr-latn/oblasti/popis/popis-2011/>

<sup>7</sup> Quarterly Gross Domestic Product at Constant Prices for the flash estimate, IV quarter 2022 31.01.2023. <https://www.stat.gov.rs/vesti/20230131-kvartalni-bruto-domaci-proizvod-u-stalnim-cenama-fles-procena-iv-kvartal-2022/?a=0&s=090201>

<sup>8</sup> Statistics of International Economic Relations, NBS, <https://nbs.rs/sr/drugi-nivo-navigacije/statistika>

<sup>9</sup> Statistics of International Economic Relations, NBS, <https://nbs.rs/sr/drugi-nivo-navigacije/statistika/>

<sup>10</sup> Exports grew to EUR 2 billion, BizPortal, 23.12.2022, <https://bizportal.rs/biz-it-zona/izvoz-porastao-na-2-milijarde-evra-brnabic-saopstila-lepe-vesti-u-it-sektoru-zabelezen-ogroman-rast/>

<sup>11</sup> Average salary per employee, November 2022 <https://www.stat.gov.rs/vesti/statisticalrelease/?p=13711&a=24&s=2403?s=2403>

<sup>12</sup> Marko Vučetić, Pulse of Serbian IT community: Salaries in IT sector are still on the rise – average amount over 1600e, Helloworld.rs, 26.09.2022.

<https://www.helloworld.rs/blog/Puls-Srpske-IT-zajednice-Plate-u-IT-sektoru-i-dalje-rastu-prosek-preko-1600e/15949>



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