Female Founders Monitor



Google for Startups





FEMALE FOUNDERS MONITOR **Publisher and project management** German Startups Association

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FEMALE FOUNDERS MONITOR



More women, more startups!

Germany needs startups - Germany needs a lot of startups! Innovative startups are, after all, a guarantee of economic strength in times of digital transformation. With their creative ideas, they solve social problems, create jobs and generate growth - even in such uncertain and economically difficult times as we are experiencing today. According to a study by the Berlin Senate, the capital 's startups alone employ 78,000 people, making them one of the most important job engines in the city.

However, the startup scene still has some catching up to do. Above all, it needs one thing: far more women! According to the latest figures from the Female Founders Monitor, their share still only stands at just under 16 percent. This is only a tiny increase compared with the previous year. Thus, the situation we see on the executive floors of our large corporations is being repeated in the startup sector - women are drastically underrepresented and despite all our efforts, nothing really changes. Strong women, strong economy: If we want our economy to remain strong, we have to promote and encourage female founders today in order to create the basis for an open working world tomorrow.

Strengthen female founders: That means giving women an equal stake in shaping the future. We must not leave topics such as artificial intelligence, self-driving vehicles and all the other key technological areas to men alone. Strengthening female founders also means making use of an economy 's full potential. For a long time now, just as many women as men have been studying economics - a vitally important subject for the startup sector - and even in STEM subjects the gap is gradually closing. As an economy in the international marketplace, we simply cannot afford to let this talent lie idle.

This study highlights the special qualities that female founders are already contributing to the startup ecosystem - for example in B2C business, the health sector with its high social relevance and last but not least in the social sector. At the same time, the results point to a number of hurdles that need to be overcome as quickly as possible. In the early phases, for example, women do not have as much access to the relevant contacts that can provide expertise and sometimes give them that final push needed to found a startup. Furthermore, female founders are still at a clear disadvantage compared to male founders when it comes to funding.

I would like to say a big thank you to the German Startups Association and Google for Startups for the annual Female Founders Monitor. This year's report shows us where we stand in 2020. I am sure that the study will once again spark social debate and inspire female founders. Let us utilize this momentum together - for more women and more startups!

Brigitte Zypries, Former Federal Minister for Economic Affairs and Energy

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Results at a glance

The Female Founders Monitor (FFM) is...

the key study on the importance of female founders for the German startup ecosystem, now in its third published edition. The FFM represents 4,670 founders, including 731 women (15.7%) and 3,939 men (84.3%). All the founders represent a total of 1,926 startups: 209 of the founding teams surveyed are female, 1,318 male and 384 are mixed teams, with members from both genders.¹

Three goals

- The FFM aims to advance startup research by focusing the attention on the position of female founders in this field.
- This will shed some light on the specific motives of female founders and the challenges they face within the startup ecosystem.
- A further key aspect is to provide new momentum for empowering women in the tech sector and in business as a whole.

Six key results

- The proportion of female founders in Germany has again barely increased and currently stands at only 15.7% (2019: 15.1%). This imbalance leaves enormous potential untapped.
- Female-founded teams can be found most frequently in the health sector. In view of their high level of expertise in natural sciences, female founders are key drivers of medical innovation in Germany.
- There is an overall "gender bias" in funding: When it comes to investments by business angels and venture capital funds, for example, there is an enormous gap between aspiration and reality among female-founded teams.
- Fast growth and raising high volumes of capital are still the exception for female founders: To date, only 5.2% of female-led teams have received one million euros or more - compared to 27.8% of male-founded teams.
- Female-founded teams have less established networks in key business areas
 especially in the investment sector and the traditional economy.
- Female founders are more strongly motivated by overriding goals than male founders and are therefore particularly active in the green economy and in the field of social entrepreneurship.

¹ In 15 cases the information on gender was incomplete, so that no statement could be made about the team structure.

Summary

This year's Female Founders Monitor (FFM) shows that women are still hugely underrepresented in the startup world - the proportion of female founders in Germany is currently only just under 16%. This is a negligible rise compared with last year, and the longer-term trend also indicates a stagnation. So why are we not making decisive progress when it comes to female founders? Where do the main difficulties lie? What potential could be exploited and developed more effectively?

Three areas have been identified where there is both potential as well as challenges:

- The German startup ecosystem is still strongly male-dominated. A clear majority of startups are founded by male teams, particularly in the tech sector; software applications, for example, are hardly ever female-led companies. In addition, male founded teams are more strongly positioned for growth and scalability, more focused on external investors, and far more successful in obtaining high funding volumes. For women, on the other hand, the barriers to entry are incredibly high - a challenge that can be tackled by fortifying diverse teams.
- The current discrepancy between women and men in the startup ecosystem reflects - above all - the unequal resources available to each group, exemplifying the specific challenges faced by female founders. They lack both contacts

to potential female and male co-founders, as well as the opportunity to network with established businesses and the investment sector. It is vital to provide support precisely where clear ambitions can be recognized. For example, 33.1% of the female-led companies say they prefer business angels as investors, but only 7.7% have been able to obtain this source of funding so far - the situation is similar when it comes to venture capital. Closing such gaps must be a central goal in the context of supporting female founders.

Apart from the challenges described, the results of the Female Founders Monitor also point to specific potential that women contribute to the startup ecosystem. Female founders are motivated above all by social issues and establish their innovative business models at the intersection of business and society. In light of the current Corona crisis, their strong presence in the health care space is particularly interesting - almost 17% of female-led startups are active in this sector, compared to only 6.5% of maleled teams. Considering the high proportion of female founders with a scientific background, medicine is an excellent best-practice example for empowering women in the STEM sector.

Background

1.1 Objectives of the Female Founders Monitor

Startups are a central factor of economic renewal in times of digitization: With their innovative products, founders of both sexes change existing industries and create completely new markets - the future viability of every country therefore depends largely on the existence of an attractive ecosystem for young growth companies. In addition, startups are catalysts for far-reaching social change and are already having a significant impact on the way we work, interact with other people, and engage in politics.

It is therefore worrying that the proportion of women among German founders is only 16%. It is important for women today to take on the management positions of tomorrow so as not to repeat the mistakes of the past. According to a recent study by the AllBright Foundation, the percentage of women on boards of German listed companies is still only 9% (AllBright 2019) - an imbalance that can be seen throughout the entire private business sector and which has changed very little over the past 15 years (Kohaut & Möller 2019). And it is not only when it comes to conquering the executive floors that female founders play a decisive role: As a study by the Kauffman Foundation shows, gender-diverse founding teams ensure that far more women are hired in the tech sector (Kauffman Fellows 2019).

The goal of the Female Founders Monitor is to support female founders in Germany and thus to promote openness, diversity and competitiveness in the startup ecosystem. Based on facts and figures, the study aims to raise awareness of the topic, to clearly identify current challenges, and to consequently contribute to the process of social change.

Figure 1: Definition of a startup



Startups are younger than 10 years,



planning or show significant growth in employees and/or sales



and are innovative in their technology and/or their business model.

1.2 Startup Characteristics

The term startup is generally associated with young companies, innovation, and digital business models. However, it is often unclear what the term specifically refers to. At the beginning of this study it is therefore extremely important to define exactly what a startup is and to distinguish it from other terms. Not every business that is founded can be called a startup and these differences are decisive for the economic importance of the companies and the specific challenges that women face in this area.

In the broadest sense, any type of self-employment is generally understood as founding a business. If the concept of "founding" were defined more narrowly, then one would focus on young companies. Startups are a special form of such young companies: They are characterized by a high degree of innovation and a scalable business model. Typical fields with high scalability are platform companies, social networks, or software applications which can be expanded very quickly to ever larger customer groups through the digital infrastructure. In order to develop the necessary technical infrastructure and make a brand known, high levels of investment are required in the initial phase, which, if successful, pays off with a subsequent surge in growth. Companies founded in the startup sector are therefore often associated with high risk and always require a lot of courage and persuasive power on the part of their founders alongside a good business idea.

The FFM uses the concept outlined here and is based on the data of the German Startup Monitor (Deutscher Startup Monitor - DSM) (Kollmann et al. 2019). The definition of the term "startup" follows the criteria defined there: Startups are...

- younger than 10 years old,
- innovative in their technology and/or their business model, and
- show or are planning significant growth in employees and/or sales.

In order to be included in the study as a startup, a company must meet the first criteria as well as at least one of the subsequent two. This ensures that a distinction is made between the startups examined in the FFM and other types of young companies that do not meet these criteria.



1.3 Priorities and Concept

For three successive years, the FFM has been examining the entire German startup landscape in terms of its gender-specific characteristics. Each study draws on the research design of the previous monitor, while at the same time constantly focusing on new topics: Last year, among other things, the challenge of combining work and family for female founders was highlighted (Hirschfeld et al. 2019). This year's study focuses on the areas of funding and networking - topics that represent major obstacles for female founders.

The data is analyzed on two levels: characteristics of the individual and company-specific aspects. Chapters 2 and 3 look at the life situations of female and male founders, for example their educational background and mindset. Chapters 4 to 6 focus on the characteristics of their companies, such as the industries to which they belong and funding. The startups are grouped according to the composition of their founding teams, and all-female and all-male teams are compared with each other to highlight

for 1,911 startups.

gender-specific differences. The study is based on the data collected for the DSM 2019. The DSM is the most comprehensive study of the startup ecosystem in Germany and is conducted annually by the German Startups Association with the support of PwC. The DSM differs from other studies such as the KfW Entrepreneurship Monitor (Metzger 2019a), and the Global Entrepreneurship Monitor (Bosma et al. 2020) due to its specific focus on startups. Apart from providing a snapshot of the German startup landscape, the annual format of the DSM survey also allows readers to identify important trends and developments over time.

The high quality of the data is ensured by the dissemination of the survey through select multipliers in the startup ecosystem and comprehensive data cleansing. Further details on the data collection methodology can be found in the DSM (Kollmann et al. 2019). Overall, the FFM 2020 contains information from 200 C-level executives and 1,733 founders about their 1,933 startups.²

Potential and Trends

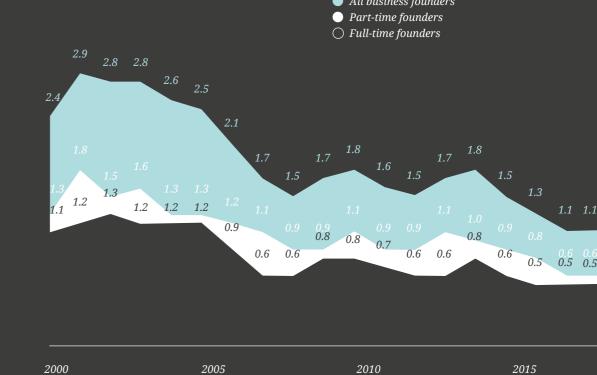
2.1 Founding Activities based on Gender

As illustrated, a distinction can be made between the process of founding companies in general and founding startups in particular. Although women are significantly underrepresented in the startup sector, they are strongly represented in entrepreneurship in general, which also includes self-employment. Consequently, the explanation frequently heard that women per se have less confidence in themselves when it comes to self-employment and entrepreneurship is not an accurate reflection of what the data tells us - and it is worth taking a closer look.

The figures from the KfW Entrepreneurship Monitor show that the percentage of selfemployment and new companies founded by people of working age has been falling continuously for almost 20 years now (Metzger 2019a). Following a peak at the beginning of this century - in 2003 the figure was 2.9% - there has been a steady decline and currently the rate stands at 1.1% (Figure 2). Even though the quality of the entrepreneurial activities should clearly be taken into account and a distinction should be made, for example, between entrepreneurship as a main or subsidiary job, this figure is an important indicator of entrepreneurial activity in Germany. The declining number of new busin-

esses is thus a clear warning in the context of economic renewal and innovation.

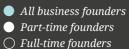
Looking at the gender distribution of new businesses in general, we see that the proportion of women is at a relatively high level and has remained relatively stable for a long time. After some interim declines, the figure rose again from 37% to 40% in 2018 (Metzger 2019a). Even though 40% does not constitute parity, the figures show that women are very much involved in founding companies in Germany. The dense, established funding landscape certainly plays a central role in this respect: For example, the "gründerinnenagentur (bga)" – National Agency for Women Startups Activities and Services -, an information and service centre, has been supporting female founders throughout Germany since 2004. Various regional initiatives and institutions are brought together under this umbrella, such as WeiberWirtschaft in Berlin and the initiative Gründerinnen-Consult from hannoverimpuls. These players are important as they point to the possibility of entrepreneurship as a professional opportunity for potential female founders and support them with the implementation of their own business idea.



2.2 Women in the World of Startups

In general, there has been a strong downward trend in new business activity in Germany for years. The main reasons for this include the general trends on the employment market and changing economic policies. For example, the boom in new company formations at the beginning of the 2000s is closely linked to the high unemployment rate at that time and new government measures to subsidize self-employment. The subsequent decline correspondingly reflects the positive developments on the labor market. This means that when we look at trends in selfemployment and new companies, we must always take general economic trends into account before coming to any conclusions about the status of entrepreneurial activities and innovative strength.





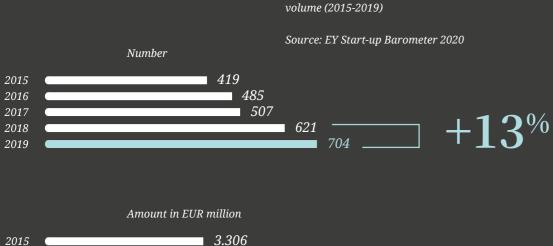
While the number of new entrepreneurs in Germany has declined sharply in recent years, the quality of the new businesses has improved. This can be clearly seen if we distinguish between companies formed out of necessity - due to the lack of any better alternatives to earn a living - and startups that are based on a specific opportunity: While the share of "necessity entrepreneurs" has fallen continuously since 2008, the share of "opportunity startups" has roughly doubled in the same period (Metzger 2018). More and more people are thus realizing their innovative ideas by founding a company alongside or instead of their existing profession. As a closer look at KfW shows, this is particularly true of innovative growth companies - the number of startups in Germany is growing

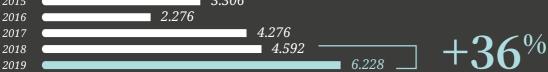
steadily (Metzger 2020). The ever-increasing economic significance of startups can be seen not least in the development of the funding sector. The volume of funding for German startups has reached a record of well over EUR 6.2 billion this year and, with the exception of a dip in 2016, has risen continuously (EY 2020). The growth in the number of financing rounds over the same period clearly shows that the capital is also reaching more and more companies within the startup scene (Figure 3).

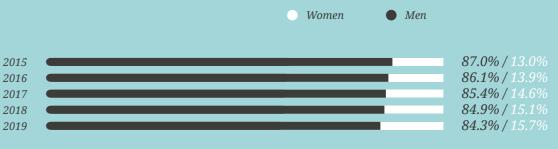
The startup sector is thus growing and becoming an increasingly important pillar in economic development. But what role do women play in the world of startups? Unlike entrepreneurship in general, women are heavily underrepresented in the German startup sector, currently accounting for only 15.7%

of startup founders, which is only a very slight increase compared with the previous year (Figure 4). The imbalance in the startup sector is not a German problem, but an international one. Unfortunately, internationally comparable data is still rare (WEF 2020) - but according to the Global Startup Ecosystem Report there are first signs that some startup ecosystems in the USA, for example in New York and Chicago, stand out positively with a strikingly higher share of female founders. In contrast, the German and French hotspots Berlin and Paris are at the bottom of the roster when it comes to the number of women founding startups (Startup Genome 2019). In an international comparison, the number of female founders in Germany is equally negative as the proportion of women in top management (AllBright 2019).

Figure 3: Number of financing rounds and investment







2.3 Huge Potential

Another important difference between entrepreneurship in general and startups in particular can be found in the educational background of the founders. In the startup sector, four out of five people have a university degree (Kollmann et al. 2019); by contrast, among new entrepreneurs in general the figure is only 29% (Metzger 2019b). The key role played by universities in the startup sector demonstrates just how crucial the experience and expertise gained there are.

Economic, technical and scientific knowhow are of particular importance in the startup ecosystem. Four out of ten founders studied economics or business administration - roughly the same proportion has a background in a STEM subject, i.e. a degree in science, technology, engineering, or mathematics. In order to quantify the existing potential of women for the startup sector, it is worth taking a closer look at the gender distribution of these degrees and their development over time (Figure 5). Figure 4: Distribution of founders by gender

Since the 1990s, the gap between the number of female and male students at German universities has gradually diminished. In fact, in recent years, the number of female students has overtaken men. The same trend can be seen in economic sciences, an important subject for the startup sector: While the proportion of women at the end of the 1990s still lagged behind that of men, women now make up the majority of students in this subject. The situation is somewhat different in the field of computer science: Women are still clearly in the minority here, representing only 21.8% of students - though the proportion has risen steadily over the last two decades. However, as the example of the natural sciences shows, in some STEM subjects there has been a relatively balanced gender ratio in place for some time. Overall, women in Germany offer great potential in terms of startup-relevant expertise. Thus, the fact that the number of female founders in Germany is still very low cannot simply be dismissed by referring to other fields of interest and academic backgrounds.

Figure 5: Share of women among first-year students in selected subject groups



Source: Federal Statistical Office (2019)

| | \ \ \ | | N | |
|----------|-------|-------|-------|-------|
| WS 99/00 | 16.9% | 21.7% | 47.1% | 49.2% |
| WS 01/02 | 16.8% | 20.6% | 48.0% | 49.5% |
| WS 03/04 | 15.1% | 19.9% | 48.3% | 49.4% |
| WS 05/06 | 16.4% | 20.0% | 49.2% | 50.2% |
| WS 07/08 | 16.7% | 21.5% | 50.4% | 51.8% |
| WS 09/10 | 18.3% | 22.1% | 49.0% | 52.5% |
| WS 11/12 | 18.7% | 20.5% | 42.4% | 49.7% |
| WS 13/14 | 20.7% | 23.6% | 45.5% | 52.2% |
| WS 15/16 | 21.9% | 25.0% | 45.4% | 51.8% |
| WS 17/18 | 21.7% | 25.7% | 48.0% | 52.1% |

³ Engineering sciences do not include computer science.



Interview with Veronika Riederle

Founder and CEO at Demodesk

FFM-Team: You worked in the consulting sector for a long time, but also gained some experience at Outfittery. What motivated you to start your own business and what do you do at Demodesk?

Veronika: Actually, even before I worked in the consulting sector, I knew that what I really wanted to do was help set up a software company - either as a founder or an early employee. I derive enormous amounts of energy from creating things and for me software is the most exciting industry there is. I then met my co-founder who came up with the idea of developing a new way of screen sharing. Our intelligent meeting tool for customer interaction helps companies to make their processes more efficient. Our solution is entirely web-based and allows you to share specific content with someone via a virtual display. *FFM-Team:* You have recently raised capital: How did you go about this and how do you present your startup to potential investors?

Veronika: That's right, we successfully completed a financing round some time ago. We participated in the Y Combinator program in Silicon Valley from early January to March 2019 and did our seed round right afterwards. That was without doubt a very special opportunity because at the Y Combinator Demo Day you present your company to virtually all the key investors in the Valley. So the process is really focused and it is a fantastic opportunity. In your pitch you should focus on the three most important messages. That 's all anyone can really take in - even in other talks. In our case, we focused on our unique screen sharing technology, the market potential, and our traction, i.e. the customers already acquired.



FFM-Team: You just mentioned Y Combinator. What did you get out of the program and would you recommend other founders to apply?

Veronika: I would recommend it 100 percent. In my opinion, it 's the most helpful accelerator in the world if you 're ready for the US market. During your time there, you learn to focus and can build up a fantastic network of potential clients and investors. Y Combinator branding also helps with new customer acquisition and recruiting.

FFM-Team: Female founders like you are still a rarity in Germany - they currently only account for 16% of startups. What do you see as the biggest challenges for women in the startup sector?

Veronika: I suspect that women tend to underestimate themselves more often and are

more risk-averse than men. In some cases they also communicate more cautiously. In addition, there are also fewer women with a background in technology and STEM subjects. Family is certainly also an important aspect. A lot of people start their businesses in their late 20s and this often coincides with family planning. As a mother, I know that it can work, but it is also a challenge.

FFM-Team: What would you wish for in the German startup ecosystem?

Veronika: I would like to see more willingness to take risks and for people in Germany to think big more often. While people in Germany are often very cautious, Americans are mainly interested in the size of the potential market. Overall, however, we also need greater acceptance of failure - especially in the early stages. Better networks must be created and better access to capital.

Interview with Michelle Skodowski

Founder and COO at Botfriends

FFM-Team: How did you decide to found a company?

Michelle: I met my co-founders through exchange programs at university. After we had all done internships in large companies, we realized that we simply wanted more speed and more freedom. We then wrote a joint project paper on bots and the underlying technology and used this as the basis for the foundation of our company Botfriends.

FFM-Team: How did your startup develop and what exactly do you do at Botfriends?

Michelle: We founded Botfriends in our last year at university simply as a project-based company without our own product. This gave us enough time to get to know the market, acquire our first big customers such as Porsche and to think about the design and appearance of our own chatbot solution. We started working on the development of our product in the middle of 2019. Currently we are focusing on creating our own chatbot solution and transferring our existing customers to our product. Over the next few months we also want to increase our market share. This means raising capital and focusing even more strongly on the areas of development and sales.

FFM-Team: At the beginning, what were the biggest challenges?

Michelle: The biggest challenge was to find the courage to do it. Our professor for entrepreneurship was an important factor here. He was not only our mentor, he even gave us a private loan so that we could establish our limited liability company - a German GmbH. That meant we didn't have any financial worries which gave us the final impetus.



FFM-Team: At the moment there are relatively few female founders like you in the startup sector - the proportion of women is about 16%. What could be the reason for this and how can it be changed?

Michelle: In my experience, women are often more anxious about starting a business – especially about financial losses – and are not as relaxed as men when it comes to the general lack of security in this area. These concerns grow when female founders have to take on responsibility for their family alongside their business. If the proportion of female founders is to increase, this lack of security must be remedied; mothers should get more support and balancing work and family planning should be made easier. It is important to create a level playing field for men and women so that family responsibilities are better distributed. *FFM-Team:* As a founder in the field of artificial intelligence you are still a rarity. How can we get more women interested in AI?

Michelle: I can only tell you about my time at university: As a woman with relatively little previous knowledge of programming, I was always in the minority. Women quickly start to feel uncomfortable in this environment and don't want to ask questions. You have to develop a thick skin. Women should network much more closely in these fields and exchange experiences more. I think tutoring programs where you can test your potential are a very good approach here.

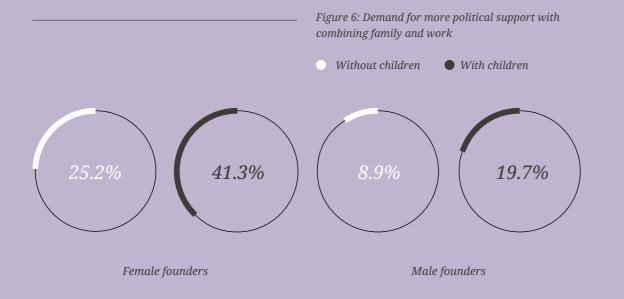
A Typical **Female Founder**

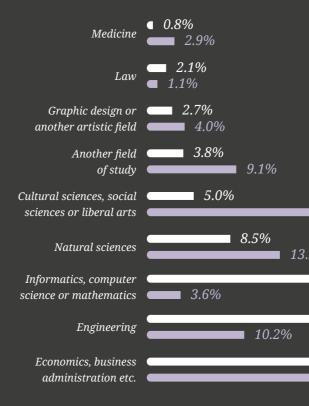
3.1 Age and Work-Life Balance

One impactful image of founders, both female and male, is still that of very young people who drop out of university and start a business in their early twenties. The Mark Zuckerberg stories are the exception rather than the rule.

Irrespective of gender, the average age of founders is around 35 years and the largest number of founders start their businesses between the ages of thirty and forty (45.9%). The proportion of those who found a startup before the age of 25 is only 8.9%.

Since the typical age at which people found companies coincides exactly with the time they would typically start a family, some very unique challenges arise when it comes to balancing family and work. The FFM 2019 showed in detail that family tasks are distributed very unequally between women and men - even in the startup area - and that female founders face greater challenges in this area (Hirschfeld et al. 2019). This dual responsibility is a major hurdle for women when trying to found their own startup. The female founders themselves also see this as one of the most critical problem areas and expect more political support (Figure 6).





3.2 Expertise and Academic Background

Both women (81.1%) and men (81.8%) have usually completed a university degree before founding their startup. This high rate reflects the economic, technological and digital expertise that innovative growth companies need. In addition, it provides indications of soft skills, a specific mindset, and networks that are created in the university context. Regardless of gender, therefore, a university degree is the standard educational path in the startup environment, usually followed by several years of work experience. Clear differences can be seen in the subjects studied (Figure 7): Female founders are significantly more likely to have completed a degree in the

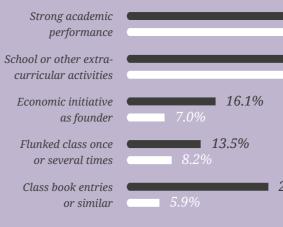
| Male founders Female founders | |
|--|--|
| | |
| 1 16.8% 5% 17.9% 20.4% | |
| 38.89 38.79 | |

humanities and social sciences and are also strongly represented in the natural sciences. The opposite picture can be seen in the fields of computer science, mathematics, and engineering. The number of male and female founders who studied economics and business, very important subjects in the startup sector, is roughly equal.

On the one hand, these figures reflect the different academic specializations among the general population - in computer science and engineering, in particular, women are still hugely underrepresented (see Chapter 2.3). On the other hand, the situation in natural

sciences shows that it is possible and important to mobilize and encourage women in specific subjects. In computer science in particular, there is a clear need to catch up, because even in terms of distribution among the population, the proportion of female IT graduates in the startup sector is alarmingly low. It is precisely here that specific initiatives can have a strong impact, such as Google's "Made with Code" initiative which provides a lowthreshold introduction to programming for interested young women, or Girls Who Code, a non-profit organization that has been working for many years on closing the massive gender gap in the tech sector. These differences in the subjects studied should not lead us to lose sight of the general imbalance between women and men in the startup sector. The share of female startups is only just under 16%, and this cannot simply be explained by any general reference to fewer women studying STEM subjects. The blanket forecast that ratios will automatically level off in the coming years is equally misleading. There are still a number of factors that make it more difficult for women to found their own startups - some important cultural aspects will be examined in more detail below.





3.3 Mindset and Objective

Startups often venture into new fields - their business models are promising, but also particularly risky. Consequently, founders, both female and male, need a high degree of courage, passion and perseverance, qualities that relate less to specific expertise and more to a general mindset. In order to gain insight into this strongly biographically influenced dimension, founders of both genders were asked about characteristic aspects of their schooling (Figure 8). The result: Female founders stand out above all for their performance and commitment - characteristics which relate in particular to passion and perseverance. Conspicuous among male founders, however, is their tendency to disregard the rules. In addition, the men surveyed had more often concerned themselves with the topic of founding a business while still at school.

The female founders interviewed were thus on average more focused on meeting the set requirements during their school time than

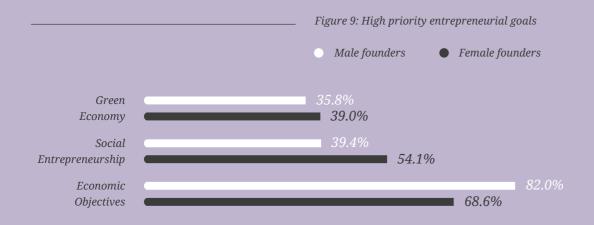
| Figure 8: Characteristic by gender | c aspects of schooling |
|---------------------------------------|------------------------|
| • Male founders | • Female founders |
| | 50.8% |
| | 51.0% 56.3% |

26.0%

their male peers which was reflected, for example, in their strong academic performance. Conversely, however, this could also indicate a lack of experience with failures and setbacks. Only just under half of the women surveyed say that they would want to found a startup again if their current company fails, compared with 63.6% of men. These differences in mindset are certainly one reason why the proportion of women in the startup sector is still so low. Stereotypical role models are deeply rooted in our culture and are also reflected in the startup ecosystem.

This makes it all the more important to be aware of the obstacles faced by potential female founders and to take targeted countermeasures. Programs such as the Grace Accelerator are very helpful here as they can give participants who have good business ideas the boost they need to create a startup, for example by providing experienced mentors, the chance to network with like-minded people or attend workshops on relevant startup topics such as funding and marketing. Tech companies such as Google, with its Immersion: Female Founders Program, also provide targeted support to female founders who are already active in the market with promising startups, helping them thrive and grow their businesses. Another important aspect of this program is to make successful female founders more visible, giving them a platform where they can inspire others and encourage a new generation of female founders.

Alongside the challenges described, however, there are also some areas of the startup ecosystem where women are already strongly represented. This is clear from a closer look at the entrepreneurial targets of the respondents (Figure 9). In general, it can be said that "purpose" – i.e. a higher goal – is extremely important for women in the startup ecosystem. In contrast to male founders, the motivation of women is more often linked to ecological sustainability. The picture is even clearer in the area of social entrepreneurship, where over half of the female founders attribute themselves. These figures are confirmed by the Social Entrepreneurship Monitor, according to which the proportion of women in this field is almost 47% (Scharpe & Wunsch 2019). The development of new and especially digital concepts within the social sector – one of the important future topics in the startup world, even before the Corona crisis – is thus largely driven by female founders.







Interview with Malin Holmberg and Yaron Valler

Partner at Target Global and Managing General Partner at Target Global

FFM-Team: Let's start with a brief introduction. What is Target Global? What is your main focus and what do you provide for your portfolio companies?

Yaron: Target is an international firm running early stage as well as growth stage VC funds. With more than 800 million Euros

AUM we invest across the digital landscape with some focus areas like e-commerce, FinTech, industrial applications and SaaS. For us it's key to work closely with our companies particularly in the areas of business development, capital formation and HR. Two well-known examples from our portfolio are wefox and Delivery Hero from Berlin. *FFM-Team:* Female founders are still rare in Germany as well as elsewhere. What do you think are the main obstacles for women in the startup sector?

Malin: First of all, there is a long-term cultural effect. We raise our kids following this notion that boys should take risks, ask girls out for dates and should learn to deal with failure. By contrast, girls are rewarded for behaving nicely and being good at school. Founding a startup is a very risky business and that puts men at an advantage. Secondly, most people build up their company about the time they are having children and it's challenging to handle both. Since women are more often the ones taking on family responsibilities, their chances in the startup sector are limited.

Varon: An equal split of family responsibilities is crucial – not only for founders. For my wife and I it was clear from the start that we both do our part. I left work at 3pm on two days a week, she did the same, and one day our family helped out.

FFM-Team: There is a huge gap between women and men concerning financing. Particularly VC money is hard to get for female founders. What are your experiences?

Malin: Due to the small number of female founders, we as investors only get to see a few companies led by women. But statistics also show that the amount of money women ask for is usually lower and that they have a harder time receiving the funding they need. Thus, we need more progressive investment firms, more diversity and more women in this field. At present, the VC-sector is quite male dominated and people tend to invest in people that are similar to them.

FFM-Team: As you mentioned, the VC-sector has few women. At Target Global this is different. How come?

Malin: Diversity at Target is very high and this is also true with respect to gender – we currently have the same amount of men and women in our investment team. Drawing from so many different perspectives really helps us to improve the quality of our work.

Yaron: One important aspect is that we don't do it by design. We focus solely on the qualities and values to get the best people. It pays off and leads to a strong, diverse, and genderbalanced team. In the general population we have 51% women and 49% men and that is the split that you should see in all companies.

FFM Team: What are your wishes for the startup ecosystem, especially concerning the empowerment of female founders?

Malin: There is a growing number of networks for female founders, which is very important. I hope that more and more firms will realize how helpful diversity is to their company. Also, I think that there will and should be more pressure from institutional investors – like pension funds – to come up with requirements concerning diversity and sustainability.

Yaron: And on the entrepreneurial side we need more female technology founders. In the academic world you already see more and more women in engineering, hard sciences and IT – I hope the business world will follow soon.

Interview with Lisa Gradow

Founder and CMO at Usercentrics

FFM-Team: Can you describe briefly how you decided to found a company?

Lisa: I actually founded my first company at the age of 17 - rather intuitively and without really knowing what I was doing. I had the idea of selling T-shirts with political statements via an online shop during an election campaign. After that, people came up to me and told me I was a founder. And then, when I was a student, I did it again and again, always trying out different things. During this time I taught myself a lot and also took computer science courses at university. This was very time-consuming alongside my law course, and very abstract for me at first. But it was interesting to see how many lines of code are behind a button or a whole application. I never became a passionate coder, but my basic understanding of programming helps me to pigeonhole our product, the tech team and the added value, as well as to explain it to customers and investors, and to appreciate it.

FFM-Team: How has your company developed and what exactly do you do at Usercentrics?

Lisa: Our idea was to help companies to make consent management on their websites practicable after the introduction of the new GDPR. The big advantage of our software solution is that it is very flexible and can look different on every website. The market for consent management platforms is generally still very young and it is very exciting being a first mover here. Usercentrics has been around for two years now and we have grown a lot, especially in the last few months. Currently we have 45 employees and two successful financing rounds behind us - we are now preparing the third one. In addition, we are beginning our market launch in the USA, as new legislation came into force there at the beginning of the year.

FFM-Team: If we take a step back, it is striking that the proportion of female founders



is still only 16% and in SaaS even smaller. Why do you think this is?

Lisa: One important point certainly is that women often simply lack the confidence to do it. What is needed here are more role models and an environment that empowers women. For many people founding a company is fairly abstract at first and only becomes tangible through experience. And particularly when it comes to SaaS, women may simply lack the points of contact: You don't even know that this world exists. After all, it is not taught at universities. We need more education and awareness – and definitely more networking.

FFM-Team: And finally: What tips would you give to other female entrepreneurs?

Lisa: It's very important for female founders to know exactly where they want to go and to communicate this clearly to the outside world. And of course, the employees are also

extremely important for long-term success. This means, as a first step thinking very carefully about who you are hiring and then, making sure that everyone is 100% involved in the daily work routine and that communication is very clear. And as a founder you should also be grateful that these people are going on this journey with you. We think it's really important that everyone in the team is happy. That 's why we installed a Chief Happiness Officer from the outset who offers coaching and also organizes other things like yoga or healthy cooking. It's tremendously important to make sure employees stay with you on a long-term basis - not only for the atmosphere, but also for productivity. And ideally, you should structure the company so that the day-to-day business works well even without you.

Companies and Business Sectors

4.1 Breakdown by Gender

In light of these insights into the motives and personal traits of female and male founders, we will now focus on the companies themselves. The analysis systematically compares startups of all-female and all-male founding teams with the aim of highlighting gender-specific differences.

Purely male founding teams are still clearly in the majority; only one in ten startups in Germany is founded by an all-female team and two out of ten startups have a mixed

founding team (Figure 10). The extremely high proportion of all-male teams points to clear barriers to entry for women into the startup ecosystem and also generally prevents the tech scene from becoming more diverse. For, as studies show, the gender structure in the founding team is also reflected in the employee structure: Statistically, even if there is only one woman in the founding team of a startup, twice as many women will be hired (Kauffman Fellows 2019).



A closer look at the mixed teams reveals that for a good third of all startup companies in women only make up 37.2% so that here, too, they are underrepresented. Nevertheless, mixed teams are a central factor empowering women in the startup sector, because this is where they are most likely to make the leap into tech. This is particularly evident within the largest sector in the ecosystem, information and communication technology. In this industry, which accounts



4.2 Team Structure and Number of Employees

Another striking feature with regard to the team structure of startups is that there are far more solo female founders than solo male founders. There are many reasons for this: As far as the goals are concerned, founding alone gives you more freedom to structure the

Germany, 82.6% of the founders are allmale, 14.2% mixed teams and only 3.2% all-female. Promoting diversity in startup teams is thus one of the central tasks for the coming years. This is particularly important because mixed teams achieve better results and diversity also pays off in terms of financial success (Abouzahr et al. 2018).



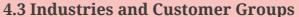
Figure 11: Breakdown of founding teams in the ICT sector

> Female Teams 🦲 3.2%

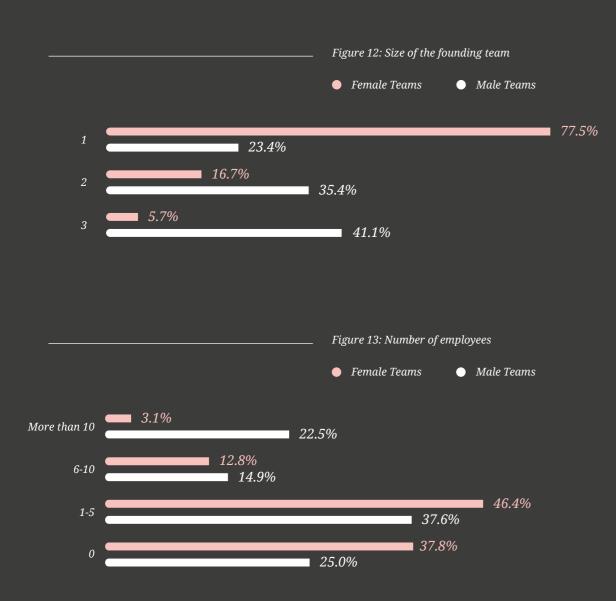
Male Teams 82.6%

startup exactly as you want it, whereas larger teams presumably require more compromises. Structurally, however, the very high proportion of solo startups among women could also indicate a lack of relevant networks in the ecosystem. Particularly in the early stages, additional people represent important resources that create decisive momentum for growth. The trends in the team structure are also repeated in the number of employees: Only 15.9% of the female-led teams employ more than five people, while this proportion is as high as 37.4% among male-led teams. The fact that women lag behind men in terms of company growth can be explained in part by

their different objectives (Chapter 3). Social entrepreneurship, for example, is a field strongly influenced by the activities of female founders, but so far has been less growthoriented. In addition, there is also a clear inequality between female and male founders with regard to access to financial resources and networks. This will be examined in detail in Chapters five and six.



As already indicated, one reason for both the low proportion of women and their discrepancy in terms of company growth lies in the specific areas in which female founders are active. For example, women are poorly represented in the key startup sector of information and communication technology



Information and com-8.8% munication technology Medicine and health care Consumer goods 10.8% Textile 8.8% Nutrition and food 8.8% Education 6.4% Human resources

Overall, the focus of female-led startup teams is in the fields of lifestyle - especially consumer goods and fashion - health, and education. Particularly the latter two sectors are strongly growing markets, which have become even more relevant in the context of the Corona crisis due to the increasing importance of health-related data and digital solutions in education. These sectors also reflect the

| (Figure 14): Only 8.8% of female teams cl sify themselves in this sector, compared 36.3% of male teams. | |
|--|-------|
| At the same time, if we look at the break of sectors, we can see that women are al strongly represented in some growth man | ready |
| Figure 14: Startup sectors (selection) Female Teams Male Teams | |
| 16.7% 2.3% | |

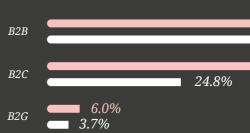
typical educational backgrounds of women in the startup sector being in the fields of economics, natural sciences, humanities and social sciences (Chapter 3.2).

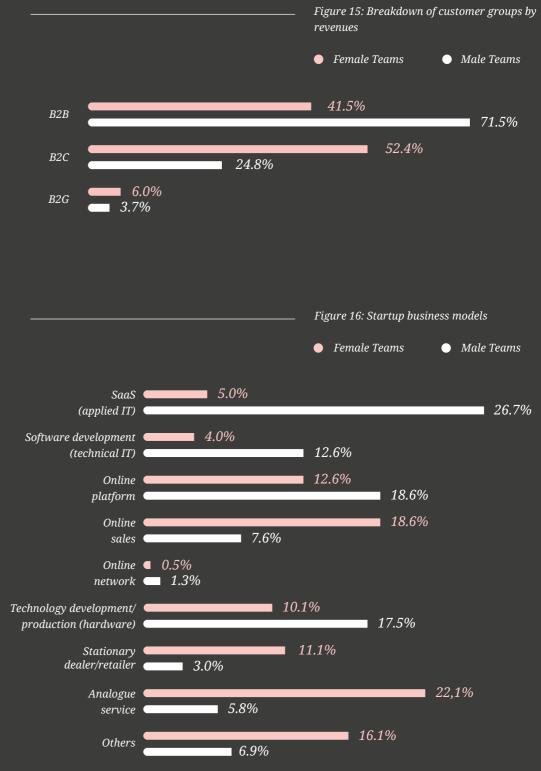
This breakdown of customer groups in terms of revenues generated confirms what the analysis of the sectors has already indicated: Female-led teams generate more than half of

their sales through B2C business, while the B2B sector is clearly dominated by male-led teams (Figure 15). The different customer focus is also reflected in the business models: Male teams dominate the IT and deep tech

sector and are especially active in the fields of software as a service, technology development and software engineering. By contrast there is a strong concentration of female teams (18.6%) in online sales (Figure 16).









Interview with Lina Behrens

Managing Director at Flying Health

FFM-Team: In all your previous activities, you have always been closely connected with innovation in the healthcare sector. Could you tell us a bit about where you have worked so far?

Lina: After graduating in economics in Switzerland, I lived abroad for a long time. First, I worked for a management consultancy firm in England, where I was involved in a lot of projects at the interface of health and technology. After working for a social enterprise in London and a company builder in Bogota, I returned to Germany in 2018. I wanted to work in the field of innovation and health again, so I joined Flying Health and have been on the management board since October 2019.

FFM-Team: What role do startups play in the health sector and how exactly do you work with them at Flying Health?

Lina: The structure of the German healthcare system is quite traditional. With Flying Health we want to actively promote innovation. We cooperate with different partners in order to bring about change. More specifically, I support startups with the development of their business models and get them in touch with relevant contacts. In addition, we support companies in connection with issues surrounding market access. Scientific evidence is very important in the healthcare sector - this also raises questions concerning the design of clinical studies in the digital field, for example.

FFM-Team: As someone who works a lot with startups, you must know that there are currently still very few female founders. According to our study the proportion is only 16%. Where do you see the biggest challenges for women in the startup sector?

Lina: I ask myself that quite often, too. There are a lot of women in our company and I have often worked with inspiring women in management positions in my professional life. That really helps because role models can show you what you can achieve yourself. But I think the biggest challenge is in the area

of financing. It is often still more difficult for female founders to obtain financing and all too often, you find yourself sitting in a room of men only at the investment appointments. But I have the impression that things are getting better, at least slowly. There are now a lot of studies that highlight the advantages of having diverse teams. Just recently we had a discussion about the FemTech sector, where the proportion of female founders is significantly higher. But even here, men have so far received more capital from investors.

FFM-Team: More and more women are studying science and medicine - in many fields they already outnumber men. How can we motivate more of them to found their own company?

Lina: Basically, the career path, if your study medicine, for example, seems relatively clear and straightforward. Founding a company here would be a deviation from the traditional path. And this requires good and supportive conditions as well as role models. When I came back to Germany, it struck me that peo-

ple in other countries are also more willing to take risks. If we want to change this, we need to change our attitudes from an early age and accept that it is okay to take a risk and that you can learn a lot if things don't always run smoothly.

FFM-Team: You are a mentor for the Grace Accelerator and as such you are committed to encouraging and strengthening female founders. How does the program work in practice and how do you get involved as a mentor?

Lina: Last year I was asked if I would like to be a mentor at the Grace Summer Camp and I was more than happy to do it. The camp brings together women who want to start a business. As mentors, we stood by the teams and talked about issues like business models or team dynamics. Basically I do a lot of mentoring because I think it 's incredibly important. Especially in the initial phase of founding a company, mentoring can help to get new impulses, but also to prioritize better.

Funding and Corporate Strategy

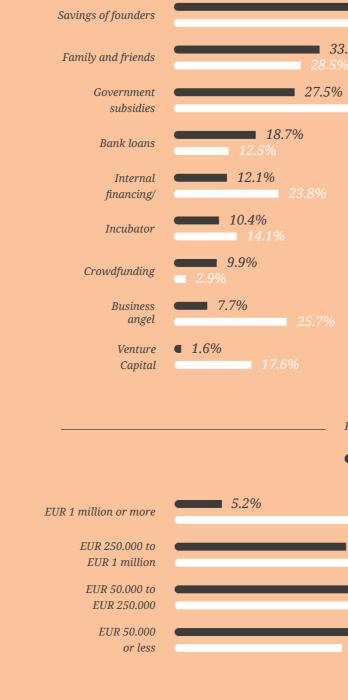
5.1 Sources of Funding and Raising Capital

Capital is the most important topic for startups and is closely linked to the company's objectives and strategic direction. The various sources of funding used by founders of both genders provide an initial overview of this subject. Personal savings are by far the most common form of funding used for startups in Germany, regardless of gender (Figure 17). Clear differences surface, however, when it comes to business angels and venture capital. These instruments, which are usually associated with larger volumes of capital, are much more frequently utilized (and accessible) by male teams. Male-led founder teams also apply for far more state subsidies (41.5%) compared with only 27.5% of female-led teams.

The differences in the types of funding can be partly linked back to the different motives for founding a startup and the main specializations (Chapters 3 and 4); furthermore, they also reflect the strategic orientation of the company (Chapter 5.3). At the same time, women do face clear disadvantages in the area of funding as proven by a number of studies. At the pitching stage of the investment process, in particular, there is a strong gender bias which reduces women's chances of obtaining capital (Hassan et al. 2020). A recent study in the New York startup ecosystem, for instance, shows that potential investors asked female founders completely different questions than male founders,

even though the quality of their company and funding needs were comparable: Men are usually given the opportunity to talk about their visions for the future - women, on the other hand, are more often asked to provide information about their current customer base and to provide concrete financial forecasts (Kanze et al. 2017).

This is a first indication of how different standards are applied to founders depending on their gender. A study on VC investments in Sweden confirms this: It shows that female founders who, in typical startup manner, are a little pushier are much less likely to succeed than men using the same presentation style. Here, too, the reason lies in the different evaluation mechanisms: Where men are usually perceived as courageous and willing to take risks in such situations, women are considered uninformed and naive (Malmström et al. 2017). The consequences of this imbalance are also reflected in our data: Overall, 42.3% of female-led teams and 56.7% of male-led teams state that they have received external capital to date. While the difference here is still quite moderate, the inequality really stands out if we look at the amount of capital raised: Only 5.2% of the female startup teams have already received EUR 1 million or more - for male founder teams, on the other hand, the figure is 27.8% (Figure 18).



| Figure 17: Sources of funding utilized |
|---|
| Female Teams Male Teams |
| |
| 84.6% |
| |
| 33.0% 5% |
| % |
| 41.5% |
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| |
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| |
| Figure 18: Volume of capital raised to date |
| • Female Teams • Male Teams |
| |
| |
| |
| 19.0% |
| |
| 34.5% |
| |
| ■ 18.6% |
| |

5.2 Preferred Sources of Funding

There are, therefore, huge differences between women and men in the area of funding, especially in the VC sector. The question that remains is to what extent these differences are due to different objectives and where structural mechanisms have the greatest impact. In order to answer this complex question, this year 's survey did not only ask founders about the sources of funding used so far, but also about their preferred sources. The results: While state subsidies are very popular regardless of gender, female teams more often seek financial support from family and friends and crowdfunding. Male teams, on the other hand, show a comparatively marked preference for venture capital, business angels, and internal financing (Figure 19).

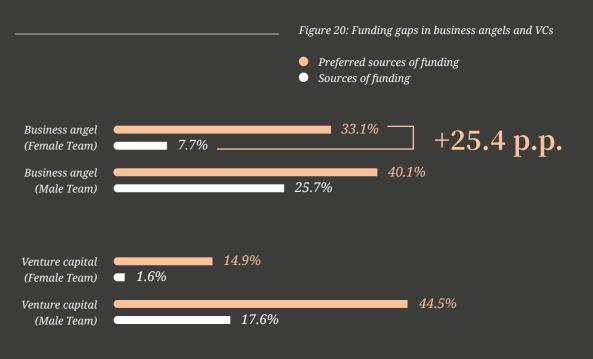
capital

The systematic comparison of the sources of capital sought and the capital actually obtained shows where the discrepancies are between aspiration and reality and, accordingly, where the greatest obstacles for female founders could lie. A look at VC financing, for example, shows on the one hand female-led teams relatively seldom pursue this type of funding, but on the other that their chances of success are also very low. The situation is similar for business angels: A relatively high percentage of 33.1% of women-led teams aspire to obtain this type of funding, but only 7.7% have been successful in receiving it (Figure 20).

Figure 19: Preferred sources of funding

• Female Teams Male Teams 52.7% Savings of founders 52.0% Government subsidies 33.1% **Business** angel 26.9% Internal financing 20.6% Family and friends 20.6% Crowdfunding 18.9% Incubator 15.4% Bank loans 14.9% Venture

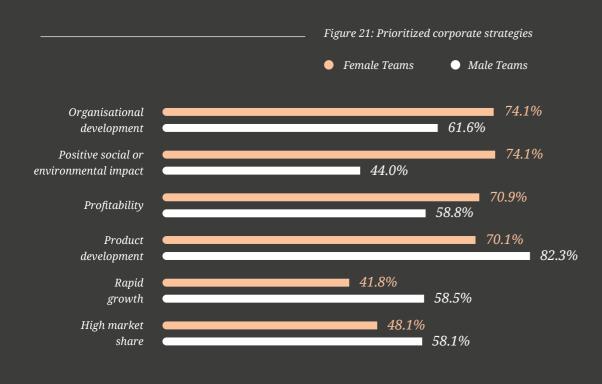
All in all, these results present a clear case for strengthening the focus of business angels and VCs on female founders. As a result of the "gender bias" described above, there is currently still an enormous potential of good business ideas and ambitious female founders. Internationally, more and more venture capital funds are emerging that invest



5.3 Strategic Orientation

We have already given considerable thought to the different entrepreneurial objectives on the basis of motives, priorities, and forms of funding. In order to gain a more detailed picture, it is worth taking a look at the strategic orientation of male and female founders (Figure 21). Three aspects stand out with the female-led teams: firstly, the strong focus on the profitability of their startup, secondly, the emphasis on internal structure and organizaspecifically in startups founded and managed by women. Examples include Ada Ventures (UK), Female Founders Fund (USA), Jane VC (USA & Europe) and Unconventional VC (Europe). In Germany the investment company Auxxo is a business angel network providing targeted support for female startups.

tion, and lastly, the great importance of overriding social and ecological goals. The strategy of the male teams, on the other hand, is characterized by a clear focus on product development and is more strongly geared towards the company 's growth. Looking back to the differences in the mindset described above (Chapter 3.3), the objectives presented reflect the female founders' emphasis on performance (profitability) and commitment



hand, the stronger growth orientation among the male founder teams points to the greater willingness of men on average to take risks.

Overall, these figures underline the findings so far. Nevertheless, the differences should not be overinterpreted since there are some very important similarities, such as the marked focus on profitability and product development. And a very high number of

(organisation and sustainability). On the other female founders (70.2%) state that the scalability of the business model is a high priority (Figure 22). In addition, the lower growth ambitions of women compared to those of men must be seen in the context of the challenges faced by women founders described above. Personal motives and goals always reflect existing opportunities - improving the conditions for women in the startup ecosystem thus means boosting new innovative potential.

Figure 22: Scalability as central focus

• Female Teams • Male Teams





Interview with Fabiola Hochkirchen and Bettine Schmitz

Founders of Auxxo

FFM-Team: You both have a lot of experience in the startup and investment sector and last year founded Auxxo. How did this come about and what motivated you?

Fabiola: We originally founded Auxxo because we wanted to make direct investments in a "female" way - although we don't really know what that means. We were familiar with the statistics and knew how few female founders there were in the startup ecosystem - and female investors, too - and we wanted to do something about it and use our experience to support female founders.

Bettine: We also realized straightaway how our experiences, personalities and skill sets complement each other. I worked in the early-stage sector for a long time, our co-founder Gesa Miczaika was the first employee at Blacklane and Fabiola was in the private equity sector for a long time - we all had business angel experience.

Fabiola: We have now arrived at the point where we are looking for teams with a futureproof DNA and where topics such as diversity, purpose, sustainability and new work are anchored in the very core of the company. We are convinced that this is the only way for companies to achieve long-term sustainable success.

FFM-Team: As our study shows, female startups still only account for 16%. Where do you see the biggest challenges for women in the startup sector?

Fabiola: In our view, the biggest challenge for female founders is that they don't have such strong networks yet. This can quickly lead to beginner's mistakes - for example in the selection of the first investors or the valuation of the business in the early stages. We have seen a lot of companies with really strong female founders and great ideas where such early mistakes proved to be an obstacle to success.

Bettine: One aspect that also needs to be discussed more is the lack of infrastructure for founders who are starting a family. Setting up a business and starting a family often happen in the same phase of life. If you can't get a place at a nursery for your child, it's virtually impossible to start a business. This is true for both mothers and fathers.

FFM-Team: An important prerequisite for the establishment and development of a startup is access to capital: How would you assess female founders' chances of obtaining the most appropriate financing for them?

Fabiola: Of course, you have to differentiate between the different types of financing: VCs have the very specific investment objective of betting on the next unicorn. But if you are not a candidate for VC investment, you have to look for alternatives. There are impact investors or bank loans, for example, but these two options are often not suitable for most startups. At the moment there are not many investment models between the more traditional forms of financing and VCs. Changing this is a major challenge. But it's something we would like to tackle.

Bettine: We would like to help female founders to find financing that matches their strategy and not the other way round, thinking first in terms of financing rounds. VCs aren't the only option. When you're founding a company, you shouldn't be driven by the financing model, but by the idea and the business model.



Fabiola Hochkirchen, Gesa Miczaika und Bettine Schmitz

FFM-Team: Our Female Founders Monitor also shows that female founders often have difficulties in finding investors. How can this situation be improved?

Bettine: In our experience, female founders often do not come into contact with as many people with experience in founding companies - especially outside of Berlin. It is sometimes surprising how important even little tips can be. That's why I am convinced that more and better networks are needed. Networks are essential, especially when it comes to finding business angels willing to invest.

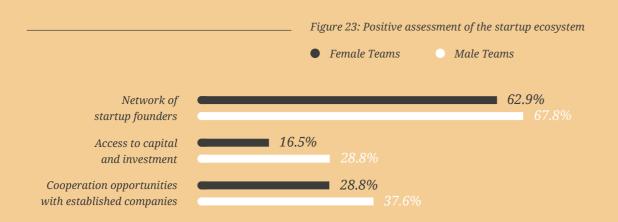
Fabiola: We have founded a network of female business angels - the Evangelistas. We are also organizing a meeting jointly with the female accelerator program Grace, where we will try to bring together all the players who are working on behalf of female founders.

Networks and Cooperation

6.1 Startup Ecosystem

The resources available in the ecosystem play a decisive role in the success or failure of a startup. These include, above all, access to sources of funding and relevant contacts. The respondents' assessments of their ecosystem provide a first impression of the importance of networks when founding a startup (Figure 23). It is quite striking that relations with other founders are mostly perceived positively, regardless of gender, although the figure for male teams is somewhat higher. In contrast, clear discrepancies can be seen in access to capital and in the opportunities for cooperation with established companies. In both areas, female-led companies rate their network far more negatively.

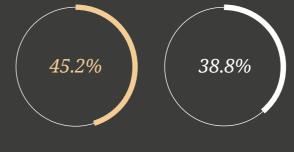
The estimates shown in the diagram confirm the difficulties encountered by women entrepreneurs in funding their companies. Furthermore, the results suggest that women in the startup sector have a weaker network within the established economy. Since good contacts to larger companies as well as access to sources of funding are central success factors in the startup sector, these two aspects will now be considered separately.



6.2 Access to Investors

As discussed in the previous chapter, there is still a gender imbalance in the startup sector in terms of funding, especially with regard to investments by VCs and business angels. This is also reflected in our data: Female-led startups state that they have greater difficulty in convincing investors than male teams, both in terms of their financial forecasts and funding needs.

When talking to investors, female founders therefore find themselves facing a number of uncertainties and obstacles. An even



Convincing investors about the financial forecasts

more important factor in explaining the low proportion of women in the startup sector and less ambitious growth plans is the access of female founders to investors: 56.7% of the women-led startups, for example, state that they have difficulties in gaining access to either male or female investors and their network. Among male teams, this figure is much lower at 36.7%. This enormous discrepancy makes it clear that, in addition to the "gender bias" in the investment process, the lack of contacts within this sector is one of the most important problems for female founders.

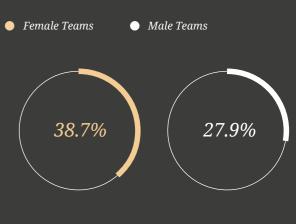
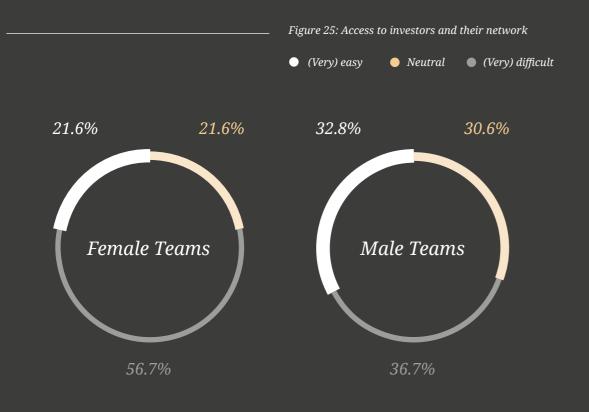
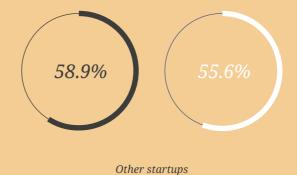


Figure 24: Difficulties in convincing investors

Convincing investors of the funding needs





6.3 Partner Relationships

Funding, product development, profitability, and the development of new markets are key objectives of startups. In this context, partnerships with other startups and established companies can be very important in order to bundle forces and create synergies. Almost half of all startups cooperate with other startups, irrespective of the founding team involved. Clear gender-specific differences can be seen when it comes to cooperation between startups and established companies: While more than two thirds of the male teams cooperate with established companies (68.8%), the figure for women-led startups is only 53.2% (Figure 26). The two most important goals that womenled startups associate with partnerships are increasing financial resources and the use of new technologies. For the male teams, capital is also at the top of the list, followed by the development of new markets. The diagram showing existing partnerships with the established economy presents a similar picture as the previous chart on access to the investment sector (Figure 25), although the gap is not as wide overall.



Figure 26: Existing cooperations among startups



Established companies



Judith Dada, Jeannette zu Fürstenberg

Interview with Jeannette zu Fürstenberg and Judith Dada

Founding partner of La Famiglia and partner at La Famiglia

FFM-Team: You run La Famiglia together, an investment fund for startups. Where are you from and what motivated you to go into this field?

Jeannette: I come from a typical German family business in the Rhineland and there-

fore got to know the "German Mittelstand" at a very early age. In my previous work in late-state investing I realized that successful entrepreneurs are characterized by their unique view of the world. Looking at things from the perspective of the advisory board of my family's business, I noticed that we are not fully aware of the trends that were relevant to us. That's why I entered the startup scene and began to invest as an angel and build up my network. Because particularly for B2B startups, an industry network is very valuable. That's basically what motivated me to co-found La Famiglia and support startups to get the visibility they need in the established economy.

Judith: I have been with La Famiglia for more than 2 years now. I studied economics, communication and technology management and worked a lot at the intersection of data science and social sciences. After graduating, I joined Facebook and was responsible for the Amazon account, one of the largest global accounts in data consulting. This is where I saw how efficiently such companies handle their data. We set up the Facebook VC initiative in order to support startups in this field and I then got to know a lot of startups and VCs - including La Famiglia and Jeannette. I found her vision for the European ecosystem and the kind of companies we need to create incredibly exciting. There is a whole lot to be done here and that's why I decided to become part of La Famiglia.

FFM-Team: Startups and the VC sector are still a male domain. La Famiglia is an exception with two women at the top. How do you perceive the scene? Does it need more female investors?

Judith: Jeannette and I rarely meet any other female investors in our everyday work. Nevertheless, I think things are changing. There has been some positive news lately, such as the promotion of Irina Haivas to partner at Atomico.

Jeannette: I also believe that investors are becoming more aware of the issue of diversity. Atomico's Diversity Report also shows this. The growing importance applies both on the performance level, because diverse teams are more successful, and on an abstract level: In a society that will be strongly influenced by artificial intelligence in the future, the female perspective must be taken into account in technology design.

FFM-Team: As our study shows, the proportion of female startups is still only just under 16%. Where do you see the biggest challenges for women in the startup world?

Jeannette: In my view, there are three issues here: Firstly, the composition of the teams, which usually follows the male-dominated student and professional networks. I also get the impression that women are often more risk-averse and underestimate themselves too often. And thirdly, from my own experience as a mother of three children, I can say how challenging it is to try to develop your career at the same time as planning a family.

FFM-Team: La Famiglia is not only a VC company, but above all a network. How important are the right contacts and what tips would you give female founders in this respect?

Judith: Looking at today's ecosystem, I would particularly recommend female founders to build networks in industries or fields of technology relevant to them. This is also the strength of La Famiglia: In the B2B sector, contacts are very important and startups often lack them. We bring young companies together with potential business customers, enable them to build trust and thus shorten the sales cycle.

Outlook

The Female Founders Monitor 2020 shows that women are still drastically underrepresented in the startup ecosystem. The reasons for this are complex and often deeply rooted in our culture. Additionally, there are very specific obstacles that we need to tackle swiftly and decisively: Women devote more time and energy to their families and often simply do not have the necessary time for their own company - as last year's study already made clear. Moreover, women founders are at a strong disadvantage in the area of funding, especially when it comes to raising larger amounts of capital through business angels and VCs. And finally, there is a clear imbalance as regards contact to the investment sector as well as the established economy.

The strengthening of female startups should address these areas in particular, in order to give the startup ecosystem the diversity that it urgently needs. It must be remembered that, in addition to their entrepreneurial drive, women are also more strongly motivated by overriding goals and are consequently a decisive force behind both the green economy and the field of social entrepreneurship. With regard to technical innovations, the health sector especially benefits from welltrained female founders with the appropriate expertise.

Social cohesion, sustainability, and health - these are all key areas, not only since the onset of the Corona pandemic, that will be shaped by female founders and thus advance our economy and society.



Bibliography

Abouzahr, F.; Taplett, F.; Krentz, M. & Harthorne, J. (2018): Why Women-Owned Startups Are a Better Bet.

AllBright (2019): Entwicklungsland. Deutsche Konzerne entdecken erst jetzt Frauen für die Führung.

Bosma et al. (2020): Global Entrepreneurship Monitor: 2019/2020 Global Report.

Ernst & Young (2020): Start-up-Barometer Deutschland Januar 2020.

Hassan, K.; Varadan, M. & Zeisberger, C. (2020): How the VC Pitch Process Is Failing Female Entrepreneurs. Harvard Business Review.

Hirschfeld, A.; Mütze, J. & Gilde, J. (2019): Female Founders Monitor 2019. Berlin.

Kanze, D.; Huang, L.; Conley, M. & Higgins, T. (2017): Male and Female Entrepreneurs Get Asked Different Questions by VCs - and It Affects How Much Funding They Get. Harvard Business Review.

Kauffman Fellows (2019): Startups With At Least 1 Female Founder Hire 2.5 x More Women.

Kollmann, T.; Hensellek, S.; Jung, P. & Kleine-Stegemann, L. (2019): Deutscher Startup Monitor (DSM) 2019. Berlin.

Kohaut, S.; Möller, I. (2019): Frauen in leitenden Positionen. Leider nichts Neues auf den Führungsetagen. IAB-Kurzbericht 23/2019.

Metzger, G. (2018): KfW-Gründungsmonitor 2018. Frankfurt am Main.

Metzger, G. (2019a): KfW-Gründungsmonitor 2019. Frankfurt am Main.

Metzger, G. (2019b): KfW-Gründungsmonitor 2019: Tabellen- und Methodenband. Frankfurt am Main.

Metzger, G. (2020): KfW-Start-up-Report 2019. Frankfurt am Main.

Malmström, M., Johansson, J. & Wincent, J. (2017): Gender Stereotypes and Venture Support Decisions: How Governmental Venture Capitalists Socially Construct Entrepreneurs' Potential. Entrepreneurship Theory and Practice, 41: S. 833-860.

Berlin.

Startup Genome (2019): Global Startup Ecosystem Report 2019.

tät, Geschlecht, Studienfach.

World Economic Forum (2020): Unleashing the power of Europe's women entrepreneurs: Six ideas to drive big change.

Scharpe, K.; Wunsch, M. (2019): Deutscher Social Entrepreneurship Monitor 2019.

Statistisches Bundesamt (2019): Studienanfänger: Deutschland, Semester, Nationali-



Alexander Hirschfeld heads the research division at the Startups Association. He is the project lead of the German Startups Monitor and responsible for all studies published by the Startups Association on various topics related to the ecosystem, such as the Female Founders Monitor. He has a doctorate in the field of sociology, with a thesis on changes in the working environment. In his teaching and studies Alex has focused on the relationship between industry and technology at different universities in Germany and abroad. This included one year spent as a visiting researcher at Columbia University in New York.



Nina Wöss Active in the European startup community since 2012, Nina got to know the ecosystem from different angles. As a

Publisher and authors

Startups are the driving economic force of the future - visionary founders putting great ideas into practice. As the representative and voice of startups in Germany, the **German Startups Association** has been committed to a founder-friendly environment since 2012 and currently represents more than 900 startups.

Within its network, the Startups Association enables an equal exchange between innovative young companies, established businesses and the political sphere. The Startups Association makes sure that entrepreneurial knowledge and experience are passed on from one generation of founders to the next and helps to bring the startup culture into more traditional medium-sized businesses and corporations. A key concern for the Startups Association is the empowerment of women in the startup ecosystem. With this objective in mind, the Female Founders Monitor has been published annually since 2018.

The Startups Association's mission is to make Germany and Europe a place in which startups can thrive, in which taking risks is rewarded and which offers the entrepreneurial pioneers of our time the best conditions to succeed with their innovative ideas. It is guided by the vision of an open, equal and progress-driven society. Please find further information on the Startups Association at: www.deutschestartups.org



Principal and later Head of Marketing & Community at Speedinvest, a pan-European seed-stage VC fund, she put her focus on portfolio services and knowledge exchange among founders. In 2016 she co-founded Female Founders, an organization that aims to change economy and society by fostering entrepreneurial leadership. Female Founders currently runs different programs, among them a startup accelerator for female-led ventures from all over Europe and a female leadership program for corporate talent.



Jannis Gilde is responsible in the research division of the Startups Association for the development and relations with the partner network of the German Startup Monitor as well as for data analyses. He is also contributing to further studies on the ecosystem as an author. Jannis holds degrees in political and administrative science from Zeppelin University in Friedrichshafen and the Free University Berlin. In addition to his studies, he gained practical experience in the field of political communication in Berlin and Brussels and at a leading strategy consultancy.



Partner and sponsor of the study

Google for Startups supports startups around the world. The mission: to guide founders through crucial phases of their development, to support startup communities and to network them; on the one hand by providing products, resources and best practices from Google, and on the other by mobilizing the global Google network, which includes many established startup organizations, experts and investors.

Google for Startups wants to create a level playing field for startup teams and has been publishing the Female Founders Monitor together with the German Startups Association since 2018. The study shows that women continue to be underrepresented in the startup world and have less access to resources (particularly financial) and networks. This is why Google for Startups has introduced its mentorship program - The Immersion: Female Founders Program accompanies female founders through the growth phases of their startups, supports them with mentors and Google experts, connects them within the founder community and investor scene, and gives them more visibility within the ecosystem.

You can find out more about Google for Startups at https://startup.google.com/intl/de/ and on Twitter @GoogleStartups

Google for Startups

Mayra Frank is responsible for the Germany strategy at Google for Startups. She is committed to fostering a more diverse startup community and supports female founders in Germany and Europe by promoting targeted programs and initiatives. Prior to Google for Startups, Mayra worked on Google's brand strategy in Silicon Valley and ran global philanthropic initiatives for Google.org.

Mayra has a background in communication, innovation management and design thinking: She studied at the University of the Arts in Berlin and at Central Saint Martins College of Arts and Design in London. **Zoé Gadsden** develops content and formats at Google for Startups to educate, connect, and support founders in their careers and company growth. Previously, Zoé served as Head of New Ventures for Tech Open Air, Europe's largest interdisciplinary technology festival. She is also a founding member of Female Narratives, a creative agency committed to creating a more inclusive media landscape.

Zoé's background is in experiential marketing, and she studied economics, art management, and art history in New York.