

Foreword

According to a 2021 study by Startup Heatmap Europe, only 16.9% of founders or co-founders in Europe are women, and this trend is echoed in Switzerland, one of the world's most innovative countries. This underrepresentation not only discourages women from pursuing their entrepreneurial dreams, but it also creates significant hurdles for those who do.

One of the key barriers that female entrepreneurs face when developing their businesses is a lack of access to venture capital or funding. In 2022, only 3% of total invested capital flowed to startups with female CEOs according to Startupticker 2023, which is a large underrepresentation of their entrepreneurial ventures. Moreover, female CEOs get 38% less funding than their male counterparts who start under similar conditions according to Startup Heatmap's survey 'Women Entrepreneurs in Europe' conducted in 2020, showing a big funding gap.



In this report, we aim to address these gaps and barriers that lead to women's disadvantages in entrepreneurship in Switzerland. Our goal is to highlight successful Swiss female entrepreneurs while remaining critical of the challenges that many women still face in economic contexts. We want to celebrate women who have broken through the barriers and built thriving businesses, but also acknowledge that there's a lot more to do to close the gender gap in entrepreneurship.

In exploring this issue further, we realize that women are held back by more than just funding problems. Gender biases and stereotypes are also perpetuated by societal norms. These cultural barriers can make it difficult for women to gain recognition and support at the same level as their male counterparts. Thus, it's crucial to address these societal norms that can negatively impact women's ability to succeed in entrepreneurship.

However, despite these challenges, we remain inspired and determined to champion female entrepreneurship. We firmly believe that diverse perspectives and inclusivity are essential for a healthy and thriving economy. By taking action and providing support and equal opportunities for all individuals, no matter their gender, race, or socioeconomic background, we can create a more vibrant, equitable, and prosperous entrepreneurial ecosystem that benefits everyone.

Our mission is to empower women to overcome the barriers they face in entrepreneurship and create a more level playing field. We must strive to foster an environment that encourages women to pursue their entrepreneurial dreams, regardless of the challenges they may face. We invite you to join us in this important work and help us create a brighter future for all entrepreneurs.

Leonie Kellner

Project Lead & Co-Founder FEMtrepreneurs Team Lead, Innovation Office of the University of Basel



Get ready to be inspired by twenty entrepreneurial role successful businesses.

Join us as we explore the that continue to pose huge $\overline{\mathsf{O}}$ preneurs and founders.

women-led businesses.

Curious about the traits of successful entrepreneurs?

Learn what it takes to thrive

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Find out what the FemSpin-Project and FEMtrepreneurs, have to say in this report.



Get insights into the situation of female entrepreneurship by the FEMSPIN Report.

Unlock your potential and discover the top 5 reasons

d from pioneering role mod-

neurs who are shaping a better future with innovative

Get to know the publishers and contributors of this

Inclusion is a hot topic, but

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orated with us to create the FEM REPORT 2023.





MARGAUX DUCHAMP



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ELENA GROSS CEO/CSO and Founder of KetoSwiss AG



VIRGINIA HESS Founder and CEO of Dedomena Start-up, University of Basel





COLINA LIGIA MARIA

Discover 20 female entrepreneurs from Swiss universities and organisations who are shaping the future of innovation.



LEONIE JACOBS, VAY LIEN CHANG



DEANA MOHR



ANA MONTALBAN-ARQUES



RUIQING Ni



MARGAUX PELTIER



SABRINA STÖCKLI



MARIJA PLODINEC



RIS CRASSEE



ANJA MÜHLEMANN





MALIHEH KHATIBI MOGHADDAM





Summary

Explore the profound insights encapsulated in this report released by FEMtrepreneurs in collaboration with the FemSpin-Project two pioneering initiatives promoting female entrepreneurship spearheaded by the Innovation Office of the University of Basel and swissuniversities.

Women are smart and open-minded drivers of new business models and innovation. However, despite this progress, women still face various barriers when it comes to starting and scaling their own businesses. This report sheds light on the pressing issues of funding gaps and gender biases, and underscores the need for comprehensive support systems that cater to the unique needs of women-led businesses. From targeted courses to mentoring programmes and networking events, all of us must work together to empower women entrepreneurs and unlock their full potential.

Despite the numerous challenges and barriers that women entrepreneurs face, there are many examples of female leaders who have shattered the glass ceiling and achieved remarkable success. By showcasing the inspiring stories of Swiss female entrepreneurs who have overcome these barriers with resilience and determination, this report demonstrates that progress is possible.

These women entrepreneurs serve as powerful role models and inspire future generations of business leaders. Their stories reinforce the importance of women in entrepreneurship and the valuable contribution they bring to the business world. In this report, they share their valuable insights and provide practical tips to help other women succeed on their own entrepreneurial journey.

Finally, this report calls on policymakers and academic institutions to take action to strengthen the entrepreneurial ecosystem, close the gender funding gap, and remove barriers for women to start a business. Because female leaders are not only essential to the growth of a sustainable economy and to creating more inclusive and diverse business environments - they also bring unique perspectives and skills that significantly impact business success.

Last but not least, promoting inclusion is not only a sensible choice, but also a vital one for businesses to thrive and for a better society in general.

We are encouraged by the existing initiatives at universities and academic institutions in Switzerland that serve as a model for an equal and diverse entrepreneurial ecosystem that benefits everyone, regardless of gender, race, or background.

Let us work together to create a more favorable setting for female entrepreneurs. By removing the barriers that women face and providing equal opportunities, we can unleash the full potential of female entrepreneurship and foster structural, societal and economic innovation and systemic change. The future is bright, and we are excited to see the impact that female entrepreneurs will continue to have on our world!

The numbers indicate that promoting female entrepreneurship requires more work. But, this only motivates us to keep going! We are dedicated to empowering women entrepreneurs and will continue our efforts with even greater determination.

According to the FEMSPIN Report, the share of women in Swiss start-ups and spin-offs founded at Swiss universities and academic institutions was 17% in 2021. Of a total of 270 founders reported, only 47 were women. The good news is that in 2019 it was still 14% (33 women) with a total of 243 founders – a mini success!

Despite a long-standing trend of female-led start-ups raising more money from venture capitalists in 2022, only 3% of total invested capital flowed to start-ups with female CEOs according to Startupticker 2023. This lack of access to funding highlights a key barrier female entrepreneurs face when developing their businesses.

Moreover, according to Startup Heatmap's survey 'Women Entrepreneurs in Europe 2020', female CEOs get 38% less funding than their male counterparts who start under similar conditions, showing a huge funding gap and underrepresentation of their entrepreneurial endeavors in the start-up ecosystem.



On Barriers

Understanding the barriers women face in starting a business is the foundation for change.

According to the 20 women entrepreneurs with whom we conducted expert interviews, women face a variety of obstacles when starting or running their own businesses. Let us explore these barriers and work towards overcoming them, to ensure that all aspiring entrepreneurs have the opportunity to succeed.

Access to Funding

Despite the significant growth in women-led startups, one of the most significant barrier faced by female entrepreneurs is accessing venture capthat women-led startups receive 38% less funding than male-led startups, even when they have similar business plans and financial projections.

Societal and Cultural Biases

Another major barrier female entrepreneurs face is societal and cultural biases. Women are often underestimated, undervalued, and even ignored in business settings, making it difficult to gain respect, build networks, and find mentors. These biases can also manifest in gender discrimination and unequal pay, making it challenging for female entrepreneurs to compete in male-dominated industries.

Balancing Work and Personal Life

Women entrepreneurs still face the challenge of balancing work and family responsibilities. Many women have to juggle work, childcare, and household duties, which can make it difficult to devote the necessary time and energy to their businesses.

Visibility of Role Models

Another significant challenge faced by female entrepreneurs is the lack of visibility of role models. Women often have fewer female role models ital and other funding sources. Research shows to look up to and emulate, making it difficult to envision themselves succeeding in their entrepreneurial pursuits. This lack of representation can also make it challenging for women to build networks and find mentors who can guide them on their individual journey. With the growing number of successful women entrepreneurs it's time to spotlight them.

Access to Institutional Resources

As a rule, women have less access to entrepreneurial education and training opportunities, for reasons that are no longer communicated as such in public and therefore often seem outdated, such as being at home looking after children and the household, or because there are simply too few offers at academic institutions. A widely demanded solution could be offers and programmes that support women already in the early phase of their entrepreneurial career through targeted courses, mentoring programmes and networking events.

On Motivation to Start a Business

5 Reasons to become a Women Entrepreneur

Working for yourself means you are in the driver's seat. Here are 5 reasons why ALSO YOU should stop dreaming and start your own business.

- can ultimately make a difference in our society.

To be more independent. As a founder, you can have it all – no compromise between family or personal life and career anymore.

Become a role model. As a female founder, you have the opportunity to initiate change and pave the way for a new generation of women entrepreneurs.

As a female founder, you set up your own terms and start charging what you are worth. As a bonus, although women tend to be less confident than male entrepreneurs, once they're successful, they're a lot happier.

2. The opportunity to build something of junction of letting others write your narrative, you can finally The opportunity to build something for yourself. Instead realise your full potential and create an inspirational environment for making your dream become reality.

> To have a real impact. As a female entrepreneur, you cannot just address an unmet need in the market, you

On Inclusiveness

The future of work is inclusive.

Female entrepreneurs play a crucial role in driving a more inclusive and sustainable economy. Inclusive businesses are designed to focus on sectors and issues that matter most to women's lives, while actively promoting diversity and advancement for individuals of all backgrounds, genders, and races. Embracing inclusivity is not just a sensible decision; it's a vital one. A company's success relies heavily on the diversity of experiences and ideas within its team, making diversity and equality a crucial ingredient for any business that seeks to thrive.

> Anyone can be an entrepreneur. (..) Too often companies focus on simply hiring diverse employees without creating an environment where they want to stay once joining. Only with a deeper understanding of what individual entrepreneurs need can we advocate for implementing ways to support them as well as create an environment that is fair and respectful to everyone.

Anjali Raja Beharelle

Co-Founder and Board Member of Collabree Start-up, University of Zurich

1 in 3 Female Entrepreneurs face Societal and Cultural Gender Biases

How gender gender stereotypes impact growth of female-led businesses.

Despite the progress that has been made towards gender equality in the business world, female entrepreneurs still face significant biases. From a lack of access to funding and resources to being overlooked for leadership roles, women often have to work twice as hard to succeed in the same field as their male counterparts. But these challenges have not stopped countless women from pursuing their dreams. It is to the credit of role models that biases are broken. Remember, your gender does not define your abilities, and with with ambition, a great network and passion, everyone can be an entrepreneur, no matter who you are and where you come from.

Existing gender stereotypes still lead to prejudices that affect the chances of women entrepreneurs to get funding, which remains one of the biggest challenges for women. The figures prove this in black and white: In 2022, only 3% of total invested capital flowed to startups with female CEOs according to Startupticker 2023.

One explanation for the funding gap is that VCs ask different types of questions, so-called promotion questions vs. prevention questions. Women are asked about loss potential, men about profit potential.

On Biases

Gender Funding Gap



key determinants of success are passion, discipline, plan, regardless of gender."

Virginia Hess

BREAK THE BIAS



Iris Crassee



world, have a positive impact and believe that our

Deana Mohr





Margaux Duchamp



The question is not why, but why should a woman not become an entrepreneur

Sabrina Stöckli

Co-Founder of Santella Spin-off project, University of Bern



"Once you have signed up for an entrepreneurial adventure and launched your startup, you have to own it. Set ambitious goals and be brave enough to take some risks to achieve them. Don't back down when you receive criticism.

Trust yourself and listen to your intuition. Sometimes you're right! "

Colina Ligia Maria

CEO and Co-Founder of PROUD Spin-off, EPFL

Thanks to its technology, PROUD develops innovative solutions based on lab-grown diamonds for high-tech applications and for the luxury industry. In this way, the spin-off removes technological barriers and impacts a wide range of sectors while promoting a positive impact on society and the environment.



"Become a giver, share what you have, be humble, tell your story and you'll have a continuously growing network of people built on trust who will help and support you."

Elena Gross

CEO/CSO and Founder of KetoSwiss AG Start-up, University of Basel

It was a medical emergency that led Dr. Elena Gross to her business idea. Today, she is developing new therapies for neurological disorders such as migraine and Alzheimer's with her Basel-based biotech start-up KetoSwiss. KetoSwiss was voted number 1 in the biotech sector in 2020 and was one of the Top 100 Swiss Start-ups in 2022. "It's a cliché, but I remember when I was first starting out, I wondered if an award was due to my work, or just because I was a girl in tech. A man would never ask himself this question! So, be confident in what YOU do as a researcher, engineer, entrepreneur, not as a woman."

"It doesn't have to be perfect – just do it. Ups and downs are normal - keep going. You don't have to be an expert."

Margaux Peltier

CEO of Enerdrape Spin-off, EPFL

Enerdrape develops the world first thermal panel for underground environments, that allows to turn any kind of underground infrastructures from garages to tunnels into renewable energy suppliers for the heating and cooling needs of buildings.



Nuria Brüngger, Nina Beer

Co-Founders of Tropfbox GmbH Start-up, FHNW

Tropfbox offers a service for a product that has been around for ages: Menstrual products. The start-up offers sustainable menstrual products on a subscription basis. With every box sold, products are donated to projects and organisations. Tropbox's business model is based on the principles of sustainability, empowerment, value-added experience, community and social impact.



"It is an exciting journey with lots of learning for everyone. So be more assertive and stop worrying."

"Keep some spare time for your passion outside work. And dare to ask role models for advice!"

Ruiqing Ni

CEO and Founder of NeuroPAT Spin-off, University of Zurich

Alzheimer's disease is the most common form of dementia with progressive cognitive impairment, affecting 50 million people worldwide. Ruiging Ni and her team at NeuroPAT are developing a new cost-effective, non-invasive, non-radioactive imaging biomaker to facilitate personalised medicine in Parkinson's disease.



Anja Mühlemann

Co-Owner of Codefabrik GmbH Start-up, University of Bern

Codefabrik is small company with people that are passionate about developing software and hardware solutions, learning about new technologies and expanding their knowledge. The start-up has developed a safe exam tool for schools, worked with the BLS on traffic detection for their car transport and is currently testing a ski boot sensor that detects the carrier's fatigue.



On Leadership

Why Women proof to be Future Leaders

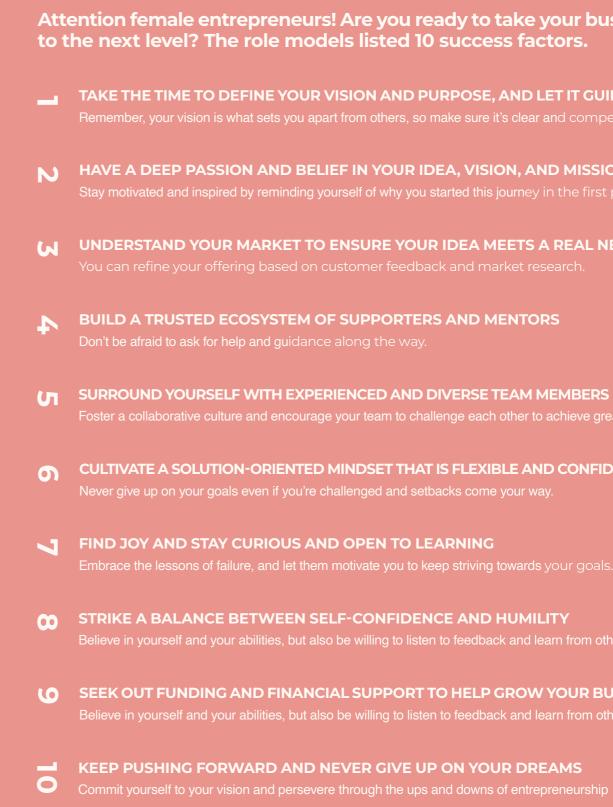
Female leadership has been a topic of much discussion in recent years, with women increasingly taking on prominent roles in business and politics. However, despite progress being made, there are still challenges and biases women face in this arena, including a lack of representation in top leadership positions or attempts to identify distinct skills that contribute to leadership effectiveness, but still reflect the same "gendered paradigm". Nonetheless, female leaders bring unique perspectives and skills to the table, which can positively impact business outcomes. Women leaders have been shown to foster more diverse and inclusive workplaces, hand over more empowerment to their teams, and have stronger communication skills, empathy, and emotional intelligence. By breaking through barriers and bringing other values to the table, female leaders are paving the way for a more equal business landscape and thus a better society.

> As a leader, I believe in self-responsibility and teamwork because each team member shapes the vision of the company and actively contributes to its overall goal..

Anina Lutz CEO & Co-Founder of Calingo Insurance Swiss Insurance Start-up, University of Basel High-Tech Entrepreneur of the Year 2022

On Success Factors

Discover the essential ingredients!



Attention female entrepreneurs! Are you ready to take your business

TAKE THE TIME TO DEFINE YOUR VISION AND PURPOSE, AND LET IT GUIDE YOU

HAVE A DEEP PASSION AND BELIEF IN YOUR IDEA, VISION, AND MISSION

UNDERSTAND YOUR MARKET TO ENSURE YOUR IDEA MEETS A REAL NEED

CULTIVATE A SOLUTION-ORIENTED MINDSET THAT IS FLEXIBLE AND CONFIDENT

Embrace the lessons of failure, and let them motivate you to keep striving towards your goals.

SEEK OUT FUNDING AND FINANCIAL SUPPORT TO HELP GROW YOUR BUSINESS

On Innovation

Need some inspiration to run after your dreams?

Look no further than the success stories of these incredible women entrepreneurs who are revo-lutionizing the industry with their cutting-edge ideas and innovative business models.



Dedomena is a start-up that emerged from a collaboration with the University of Basel and the incubator programme Impact Hub Basel 2021. The company recognises that understanding the dynamics of a neighbourhood can be challenging and time-consuming, and thus specialises in collecting and analysing location data of people and businesses moving around real estate. Its homegrown platform provides real estate investors and lenders with actionable indicators and reports, helping them make informed decisions regarding where to invest, optimise their portfolios, minimise location-based risks and adapt to market trends. Dedomena was nominated for the POWHER Award 2022 and won the Propelling Grant 2020 from the University of Basel.



MARIJA PLODINEC Chief Executive Officer at ARTIDIS Spin-off, University of Basel

ARTIDIS is on a mission to shift the paradigm of cancer treatment from the central laboratory to the patient bedside by enabling rapid and accurate diagnosis and prediction of response to treatment immediately after biopsy. The Basel-based medical technology company has developed the first nanomechanical biomarker for cancer diagnosis and treatment optimisation. Under the leadership of Marija Plodinec, ARTIDIS has raised over USD 35 million, successfully completed the large 545-patient clinical trial in Switzerland, grown to over 50 full-time positions and partnered with leading clinical institutions in the US such as MD Anderson Cancer Center, Houston Methodist, Baylor College Medicine and Moffitt Cancer Center.

Android app.



SOPHIE HERSBERGER-LANGLOH Co-Founder of Con-Sense, Spin-off, University of Basel



VIRGINIA HESS

Founder and CEO of Dedomena

Start-up, University of Basel

affordable.

MALIHEH KHATIBI MOGHADDAM CTO of MinWave Spin-off, EPFL

Success Stories



LEONIE JACOBS, **VAY LIEN CHANG Co-Founders of Vaynie** Start-up, FHNW

MinWave is reshaping the future of communication infrastructure by introducing the next generation of RF passive devices that are an order of magnitude smaller without compromising the energy efficiency. Imagine satellites, where MinWave technology considerably reduces their weight to make the human space adventure more

On Growth Future Demands

Let's invest in Women Entrepreneurs

There are myriad ways to empower women to launch their own ventures. We've curated a list of promising options for how academic institutions could help bridge the gender gap.

Shattering the Myth

equal treatment in the evaluation of women entre- examples to inspire them. It's time to raise awarepreneurs. Favoritism based on quotas must be ness and highlight that launching a business is eliminated, and women should be evaluated on not just for men. Networking events are a prime the same grounds as men. Only then can we truly avenue for building a robust support system and

Revamping Childcare Support

most challenging (and rewarding) things on the is key, providing them with the necessary tools planet! But with mothers still serving as the pri- to test and refine their ideas before embarking makers and academic institutions must develop workshops led by successful women entrepredads) and for affordable childcare for mother-led entrepreneurship. businesses. Having time for themselves not only

Empowering Female Academics as Role Models

Innovative Ecosystem Support

portive ecosystem within academic institutions

Great news! Several of these demands are already met by Swiss universities as well as private and public institutions, providing ample opportunities for women to pursue entrepreneurship. **Click to check out their programmes!**

FEMtrepreneurs	pupe
FemSpin-Project	femsj
POWHER Award	gewb
FEM'UP Switzerland	femu
Female Founders initiative	fema
Fempreneurs	femp
Future Females Zurich	future
FE+MALE Think Tank	fe-ma
HSG Female Founder Program	startı
feminno	blogs
Gender Campus	gend
Frauenarbeit	fraue
womenmatters	wome
Women for the board	wome
SWONET	swon
we/men	we-m
elleXX	ellexx
Ladies Drive	ladies
AllianceF	allian

Programmes

lla.org/femtrepreneurs
pin.ch
asel.ch/powher
pswitzerland.com
le-founders.ch
reneurs.ch
efemaleszurich.ch
ale-think-tank.com
Jphsg.com
ethz.ch/feminno
ercampus.ch
narbeit.ch
enmatters.ch
enfortheboard.com
et.ch
en.net
c.com
sdrive.world
cef.ch

About

FEMtrepreneurs is an initiative of the Innovation Office of the University of Basel to promote equal opportunities in the Swiss start-up ecosystem, focusing on female entrepreneurs and leaders. We are driven to increase the number of female entrepreneurs and leaders by reinventing how FEMtrepreneurs interact and thrive. Since our inception in 2019, we have supported over 50 women* in training, highlighted over 20 aspiring and established entrepreneurs on our pitching stage and gathered a swiss-wide community of over 2000 people.

We created the FEM REPORT 2023 in collaboration with the FemSpin-Project, with the aim to celebrate women who have broken through the barriers and built thriving businesses, but also acknowledge that there's a lot more to do to close the gender gap in entrepreneurship.

The FemSpin-Project is a collaboration by swissuniversities, consisting of the Federal Institutes of Technology at Zurich (ETHZ) and Lausanne (EPFL), the Paul Scherrer Institute, the Universities of Zurich, Basel, Bern and Geneva, as well as the Swiss Universities of Applied Sciences in Western (HES-SO), Southern (SUPSI) and Northwestern Switzerland (FHNW). Its aim is to promote equal opportunities in the field of spin-off activities by setting a specific focus on women.

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Impressum

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Data

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Interviewed Role Models

Anjali Raja Beharelle, Nuria Brüngger, Nina Beer, Iris Crassee, Margaux Duchamp, Elena Gross, Sophie Hersberger-Langloh, Virginia Hess, Leonie Jacobs, Vay Lien Chang, Colina Ligia Maria, Anina Lutz, Maliheh Khatibi Moghaddam, Ana Montalban-Arques, Deana Mohr, Anja Mühlemann, Ruiqing Ni, Margaux Peltier, Sabrina Stöckli, Marija Plodinec

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