BREAKING BARRIERS

FEMALE

TECHNOLOGY

ENTREPRENEURSHIP

IN SOUTHERN AFRICA













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"Be the inspiration and remember always, as you climb take another woman along with you"

Graça Machel

- Women creativity wealth

FOREWORD

I used to think of myself as a woman in a man's world.

Not anymore.

The idea that the tech space belongs to men, and women are barely tagging along has never sat right with me. It gives off the impression that women are in the tech sector because they have been "allowed" by men, especially in Africa.

This notion and a host of other reasons have succeeded in making it particularly difficult for women tech entrepreneurs to succeed. The factors range from the lack of support to the problematic funding gap which women tech entrepreneurs face.

Good news is, the paradigms are shifting. Sub-Saharan Africa by itself boasts the world's highest rate of women entrepreneurs, at 27%, according to the MasterCard Index of Women Entrepreneurs 2017.

A lot more must be done still. Policies and systems must be curated in a way that supports women to explore and address the challenges that these women face in their bid to become tech entrepreneurs. These challenges are one of the main reasons why I conceptualised Women in Tech Africa in the first place.

Women in Tech Africa (WiTA) is an organisation with a focus on entrepreneurship expansion and multiplying the numbers of females in technology, especially in Africa. It believes that women are equally capable of being at the forefront of technological development and advancement in Africa and the world at large. Over the years, WiTA has strategically focused on enabling women to drive Africa's growth story and create impact on personal life through technology.

Women in Tech Africa is currently the largest group on the continent with membership of over 5,000 across 30 countries globally with 12 Physical chapters in Ghana, Nigeria, Malawi, Zimbabwe, Somalia, Germany, Ireland, Britain, Kenya, Tanzania, Mauritius, and Cape Verde. Women in Tech Africa is also the 2018 recipient of the United Nations Equals Award for Leadership in the Women and Technology Space.



This publication by the Southern
Africa Innovation Support
Programme and Hivos Southern
Africa promises to be insightful, as
it will help to better understand
what the experiences are for women
in their quest to drive technology
startups in Southern Africa.
This study will also explore the
challenges female entrepreneurs
face and how to better support
the women.

Turn the page!

Ethel Cofie

Founder, Women in Tech Africa

1. INTRODUCTION

All over the world, technology is changing the way people interact, move, shop, transport goods and work. In southern Africa, it opens doors for new ventures in changing markets, and startups are taking notice.

The young population that enters the workforce now is the first generation to have benefitted from more and more African nations providing access to free primary education since the start of the millennium. Following hot on its heels, the rise of mobile telephony and smartphones started to reshape the way people trade at the marketplace, gain credit and learn at educational institutions. In a fast-paced world, it is more important than ever to ensure that women, i.e. half of the world population, are included when developing an enabling environment for

innovation. Only 31% of research positions in Sub-Saharan Africa are currently held by women¹, and globally less than a third of all companies are owned by women. It has been suggested that the gender gap in entrepreneurship is linked to other inequalities in society, including access to education and disparities in legal systems.²

The inclusion of women in the field of technology is not merely a question of equality. With the importance of technology rising, promoting female-driven entrepreneurship in all fields can have a significant impact on economic growth. According to a recent study by Roland Berger and Women in Africa Philanthropy, the overall added value created by women entrepreneurship in Africa is estimated to be USD 150-200 billion, or the equivalent of 7-9% of the total GDP in Africa. Not only do female entrepreneurs add value to the economy, but the study also shows that female founders have a tendency of starting businesses to solve social challenges they are faced with ³

Important policies have been put in place to support youth entrepreneurship in the region of Southern Africa Development Community (SADC) and on a national level. The political will is there, as is manifested in the recent declarations on gender diversity. These declarations may be seen as an important step, to



"... the added value created by women entrepreneurs in Africa is estimated to be USD150 - 200Bn ..."

Roland Berger and women in Africa Philantropy

The UNESCO Institute for Statistics (UIS): Fact Sheet 51, June 2018 [accessed 06.05.2019]: http://uis.unesco.org/eites/dafault/files/dacuments/fs51.women.in.science-2018.en.pdf

² World Bank Group: Women's entrepreneurship, November 2017: http://www.doingbusiness.org/content/dam/doingBusiness/media/Special-Reports/Womens-Entrepreneurship.pdf

³ Roland Berger: Women in Africa Entrepreneurship: A path to women empowerment? 2018 [accessed 06.05.2019] https://www.rolandberger.com/en/Publications/Africa-First-female-entrepreneurs-in-the high-tech-sector-as-new-role-models.html

begin with. We are now witnessing the most encouraging era for entrepreneurship, and the markets in southern Africa are ripe with opportunities. To understand how to better include women in technology entrepreneurship, SAIS 2 and Hivos wanted to find out more about what women experience when they drive a technology startup in southern Africa. More specifically, this study explores the challenges which female entrepreneurs face and the possibilities to better support them.

The lack of access to funding is discussed as the main challenge in several reports, and the challenges are to some extent corroborated by our findings. Much can be done on a policy level to ensure women's access to finance. Actors in entrepreneurship ecosystems can increase networking and mentorship opportunities for women.

Apart from funding, this study found that socio-cultural barriers pose the biggest challenge for female entrepreneurs. The social norms regarding gender roles in communities and families affect the way women are perceived as leaders of growth companies. These norms may be a crucial reason why there are not enough women in the fields of science, technology, engineering and mathematics (STEM). Lack of spousal support or the family's disapproval of life choices can add to the pressure on a female founder.

The young population of up to 35 years shows potential when encouraged and supported. What kind of support mechanisms for entrepreneurship are currently in existence and what is still missing?

The better we understand what it is like to run a technology-based startup, the better we can design support initiatives. Female-driven entrepreneurship has been discussed more prevalently, but nevertheless we found that little attention has been paid to highlighting women's experiences specifically in the field of technology entrepreneurship.

This report shares inspiring stories of startup founders who overcome barriers of age, gender and ethnicity as entrepreneurs in a maledominated technology industry. We also focus on experts who are involved with entrepreneurship support programmes and hear their views on what the existing challenges for female entrepreneurs are and what could be done to ease them. Our findings furthermore provide insight into entrepreneurship ecosystems in seven countries in southern Africa with regard to female-driven startups and the business support organisations operating in these fast-moving urban environments.

The findings specifically shed light on the female experience in entrepreneurship. The results can inform the business support organisations operating in these countries – and beyond – on how to design and implement initiatives that are better suited to women entrepreneurs.

We hope that the findings of this study are of interest to early-stage or aspiring entrepreneurs as well as policymakers working in the SADC region. The stories featured here should inspire and encourage the growing community of technology founders.

Lastly, with this publication, we aim to contribute to the important debate about female entrepreneurship in technology which as of yet has not included the voices from women in southern Africa. The women featured here are the powerful trailblazers who are making a social impact with their businesses at a time when they are needed the most.

1.1 DEFINITIONS

Gender vs sex: We have adopted the definition of gender from the World Health Organisation⁴ which describes the characteristics of women and men as socially constructed, as opposed to sex which refers to biological characteristics. Gender is, therefore, the acquired behaviour that makes up gender identity and determines gender roles.

Technology startup: Together with many others, we, too, have been inspired by Steve Blank's definition of a startup as "a temporary organisation in search of a scalable, repeatable, profitable business model." 5 Startup Commons defines a startup as "a team of entrepreneurial talent developing innovations, in identifiable and investable form, in progress to validate and capture the value of the created innovation - with the ambition to grow fast with a scalable business model for maximum impact." While the term startup has several definitions, one commonality is scalability enabled by technology. In this publication, technology startups are referred to as teams building scalable businesses with a product, service or process enabled by the use of technology, either hardware or software.

⁴ World Health Organisation's Gender Policy, 2002 [accessed 06-05-2019] https://www.who.int/gender/mainstreaming/ENGwhole.pdf

⁵ Steve Blank and Bob Dorf. The Startup Owner's Manual, K&S Ranch, 2012

⁶ Startup Commons website: What is a startup? [accessed 06-05-2019] https://www.startupcommons.org/what-is-a-startup.html

Female-driven startup: We use this term to describe startups where key roles in the company, i.e. Chief Executive Officer, Chief Technical Officer or Chief Operating Officer, are held by those of the female gender, not excluding teams in which both genders are represented.

1.2 HOW WE DID IT

The Southern Africa Innovation Support Programme (SAIS 2) in partnership with Hivos Southern Africa conducted this study to gain insight into barriers encountered by female-driven businesses in the field of technology. The findings have the potential to influence ways of approaching business acceleration and capacity building among business support organisations in the SADC region and thereby further contribute to a paradigm shift where women become better represented in the field of technology entrepreneurship.

We collected data from technology entrepreneurs, tech hub managers operating in the entrepreneurship support space and from experts on entrepreneurship in southern Africa.

With an online survey, we specifically interviewed entrepreneurs in the age group 18-35 years in urban centres in the SAIS 2 partner countries Botswana, Namibia, South Africa, Tanzania and Zambia as well as in Malawi and Zimbabwe, the partner countries of Hivos Southern Africa. A total of 70 responses were received and used to map out the profile of female-driven technology startups.

The online data collection enabled us to reach women across the seven countries cost-effectively and to gather quantitative data from a target group (familiar with technology-enabled research methods). Eleven tech hubs operating in business support were surveyed on their current practices regarding support for female technology entrepreneurs.

To add to the findings of the online survey, we wanted to obtain more qualitative information and organised three focus group conversations in Windhoek (Namibia), Pretoria (South Africa) and Lusaka (Zambia). They were attended by a total of 25 entrepreneur-participants. In addition, we conducted seven semi-structured one-on-one interviews with female founders, who were selected from a pool of role models pointed out by respondents to the online survey. These women are featured in Chapter 3: The Trailblazers. The seven experts featured in Chapter 5 add a perspective of experience in entrepreneurship support to the conversation.

This document with its 120 data contributing inputs may be considered as a conversation catalyst on an important topic. The findings solidified and patterns of the challenges which women face started to emerge. From every featured country, a profile of the entrepreneur whose experience we are striving to understand is documented as an example of this niche group amongst entrepreneurs

- the young female "tech entrepreneur". Still, further research is needed to complete the picture of female technology entrepreneurship in southern Africa.

2. IT'S A ROCKY ROAD BUT IT'S WORTH IT

When the road is as rocky as it is for an entrepreneur, it takes guts to pursue it. We spoke to women who drive technology companies, most of them at the early stage, in southern Africa and asked what made them start their business.

A sense of fulfilment

Participants frequently mentioned that their past experiences as employees had been unfulfilling because their true potential had not been maximized. Venturing out on their own allowed them to break out of existing circumstances and try their skills at something new. None of them described their journey as easy, but several women said it was more fulfilling to run your own company than to work for someone else.⁷

Freedom

Some would say that an entrepreneur is not free at all. Entrepreneurs are constantly under pressure to acquire and retain customers, and to ensure the company's continued existence. In our mapping, however, the word freedom repeatedly appears in the responses. Being able to set your own goals, planning the processes for your projects independently and choosing who to work with is all part of the appeal of running your own company. Entrepreneurship is not for everyone, but neither is working fixed hours or abiding by company values that one doesn't

The entrepreneurs featured in this publication talk of similar reasons for becoming an entrepreneur in the first place. Half of them have been involved in entrepreneurial activity since they were young, whether it was helping their mother sell mangos on the street or hosting beauty pageants for neighbours and charging for tickets. Some, but not all of them, had their parents as role models endeavouring in some form of entrepreneurship. While a

few respondents confirmed that initially making money was a key motivator to start the business, the majority said they identified a social problem which they were itching to solve. A key motivator for many of the women was the urge to make the world a slightly better place for future generations. So, what is the social problem you are witnessing in your community? Which solution do you want to be a part of?

The seven young entrepreneurs profiled next are prime examples of those determined to solve a social problem.



"You will be defined not just by what you achieve but how you survive"

Cheryl Sandberg
FaceBook COO

⁷ This rings true for the Millennial generation in general – the Millennials are no longer satisfied with merely a steady pay check; they seek fulfilment and purpose according to the Deloitte Millennial Survey 2018 [accessed 06-05-2019] https://www2.deloitte.com/global/en/pages/about-deloitte/articles/millennialsurvey.html

3. THE TRAILBLAZERS

There may not be a huge number of young, female founders in the field of technology in southern Africa yet, but trailblazers do exist as they do anywhere else in the world.

QUESTIONS:

What inspired you to become an entrepreneur?

The biggest challenge you are trying to overcome as a female founder.

Your biggest achievement as a founder.

How can technology improve the lives of people in Southern Africa?

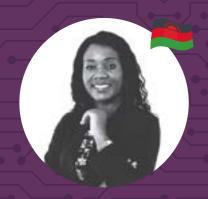
Name a network supporting female entrepreneurship in your country.



We asked one inspiring
tech founder in Botswana,
Malawi, Namibia, South
Africa, Tanzania, Zambia and
Zimbabwe to share their story.



REFILOE MATLAPENG BOTSWANA



RACHEL SIBANDE MALAWI



TANYA STROH NAMIBIA



AISHA PANDOR SOUTH AFRICA



HYASINTHA NTUYEKO
TANZANIA



EVELYN KAINGU ZAMBIA



TATENDA NDAMBAKUWA ZIMBABWE



What does Vimosure do?

Vimosure is an insurtech company focused on bridging the gap between insurance services and the underserved population of low-income earners in emerging markets by providing a more holistic, personalised and sustainable platform.



AGE: 23

COMPANY: Vimosure

COUNTRY: Botswana

WEB: www.vimosure.com

Initially I was inspired to become an entrepreneur because of the absolute and unmitigated joy of being able to manifest my creative abilities and my rare skill in software development. But eventually I realized that people face unique economic issues, especially in financial services, which I can help solve for them. I then took it upon myself to be a part of the massive efforts to improve the financial lives of individuals in Africa through innovative financial services.

2 My biggest achievement as a founder was growing the company from just one person (myself) to four people. Our team is diverse, we all have different and unique backgrounds but we manage to keep the culture of innovation intact and healthy. This has taught me that when people gather with one mission and common vision, they have the capability of building great things. Together we have served clients from the USA, which was a huge achievement for us.

Overcoming old gender biases and sexism is the biggest challenge I am trying to overcome. Using the first persona to discuss success feels to me as if I'm bragging. But I cannot shake off the idea that if someone knows that the company is led by a woman it may reduce the team's strength which in turn may affect my chances to have access to funding and getting any sort of business deal, especially in a male-dominated industry. As a result I am trying to adopt a stereotypically male attitude to business such as being aggressive and very strict. But remaining true to myself, owning my successes and finding my own voice as well as the ability to fully express my emotions has been the key to rising above most of the preconceived ideas and expectations.

Technology is an enabler and it delivers growth and prosperity based on greater inclusion, social cohesion and environmental sustainability. What once used to be technological infrastructure has become social infrastructure. It's seamless, intuitive and connects not just people but social intelligence. Fintech in particular has improved lives of low-income earners as well as women in general by providing access to banking solutions. People are also more likely to use other financial services such as credit and insurance, expand businesses, invest in education, all of which can improve the overall quality of lives in southern Africa.

5 NestHubs in Botswana: www.nest-hubs.co.bw

QUESTIONS

- 1. What inspired you to become an entrepreneur?
- 2. Your biggest achievement as a founder.
- The biggest challenge you are trying to overcome as a female founder.
- 4. How can technology improve the lives of people in Southern Africa?
- 5. Name a network supporting female entrepreneurship in your country.



RACHEL SIBANDE

MHUb

What does mHub Technology do?

It's a technology company focused on system development, deployment and trainings.

AGE: 33

COMPANY: mHub

COUNTRY: Malawi

WEB: www.mhubmw.com

The gaps I saw in lack of local technology solutions was an opportunity and stimulant for me to become an entrepreneur in the technology space.

My biggest achievement as a founder was setting up Malawi's first technology hub. The hub is a social enterprise that builds technology solutions for diverse clientele as a for profit entity yet offering social good services such as trainings in basic to advanced ICT skills ranging from building animations, games, robots, mobile applications and entrepreneurship for all. I have also developed an

incubator and accelerator for emerging technology entrepreneurs and other entrepreneurs from other subject areas to access business training, coaching, financing and investment readiness support.

The biggest challenge I am trying to overcome has to do with societal stereotyping of women as minorities in three spaces; the technology domain, the entrepreneurship space and the leadership arena. However, I am an optimist and also consider such stereotypes as an opportunity for me to deliver quality work that is above and beyond client expectation. Once I deliver quality work or stand up to claim my space with confidence, I have seen those stereotypes melt and start to be perceived as a professional, an entrepreneur and a technology expert not simply as a woman who must suffer institutional patriarchy.

Technology is an enabler for reaching the last mile. Technology offers the flexibility and opportunity to level the playing field for women led enterprises making entry into the local and international markets. Technology brings down the barriers that women led enterprises may face in physical market spaces. And we know that women are economically empowered they invest in their families, are likely to have more educated children that would ultimately have improved standard of life hence creating a ripple effect of improved livelihoods. Technology has the potential to enhance access to education and valuable information from physical spaces to remote spaces accessible to all manner of people regardless geo, socio political status. Technology is changing the narrative on access to finance and reaching the unbanked population. The case of mobile money and instant mobile credit facilities based on credit history and mobile money usage without need for collateral is absolutely transformative.

The Network for Women Entrepreneurs facilitated by mHub

QUESTIONS

- 1. What inspired you to become an entrepreneur?
- 2. Your biggest achievement as a founder.
- 3. The biggest challenge you are trying to overcome as a female founder.
- 4. How can technology improve the lives of people in Southern Africa?
- 5. Name a network supporting female entrepreneurship in your country.

What does Turipamwe Design do?

Turipamwe Design is a team of creative thinkers, makers and doers

– producing communication design for ideas that change the world.







AGE: 34

COMPANY: Turipamwe Design

COUNTRY: Namibia

WEB: www.turipamwedesign.com

Entrepreneurship inspired me because I wanted to do things differently from how I experienced them. Having worked for an advertising agency in Namibia and as artist in residency in Germany, I wanted to combine my passion for beautiful design and communication into a service that was unlike anything available. I wanted to create profound work that mattered not only for myself but for society at large. I knew very little about entrepreneurship when I started out, and it has been an enormous challenge and a steep learning curve. Now, looking back, I'd do it all again – in a third of the time!

QUESTIONS

- 1. What inspired you to become ar entrepreneur?
- 2. Your biggest achievement as a founder.
- 3. The biggest challenge you are trying to overcome as a female founder
- 4. How can technology improve the lives of people in Southern Africa?
- 5. Name a network supporting female entrepreneurship in your country.

Without a doubt my biggest achievement as a founder has been growing my business to its current capacity with a great team. Designing the first-ever Creative Industry Guide for Namibia, together with our project partner Joe Vision Production, and speaking on the TEDx Windhoek stage comes a pretty close second. The industry guide contextualises creative industries in Namibia by offering insights by working professionals and a comprehensive listing of creative services.

The biggest challenge I'm trying to overcome hasn't been so much my own but one that is shared. While growing my design business I have really been exposed to the design industry in Namibia with all its opportunities and challenges. Working with many creative young people, I have experienced first-hand the importance but also the lack of capacity, skills, exposure, experience and supportive mentorship, particularly regarding creative young women and designers. The biggest challenge to overcome – and at the same time, chance to grasp – would be to create more high-impact employment or entrepreneurial opportunities for fellow creative Africans, particularly women. This year I'd personally like to start this change through an in-studio training programme, called CreativeXChange, which offers technical training and mentorship for young female design entrepreneurs.

Technology has the potential to level the playing field in all areas of life, including agriculture, finance, education, health, art and culture. It enables Africans to compete regionally and globally in designing new services. Low cost applications have the potential to fast-track inclusivity by allowing African entrepreneurs to develop innovative market solutions. I believe that there is a beautiful opportunity for Africans to combine indigenous knowledge, data and technologies in unprecedented ways, creating African solutions for African problems. Sharing these technologies now matters more than ever. Access to affordable and reliable internet, high costs of software and hardware due to exchange rates and regional licencing remain a challenge.

Cood Women Good Business (GWGB) Startup Fund Namibia, www.gwgbnetwork.com





What does SweepSouth do?

SweepSouth is an online platform for booking home cleaning and other services.

AGE: 34

COMPANY: SweepSouth

COUNTRY: South Africa

 $\textbf{WEB:} \ www.sweepsouth.com$

I realised that the biggest challenges our country faces - unemployment, poverty, inequality, lack of access to quality education – could all be solved by entrepreneurs, i.e. by young people who would implement their innovative ideas to help solve these problems. My parents were apartheid activists and part of a movement to bring freedom and democracy to the country. As young South Africans today we face different challenges which are no less significant. My business was born out of the frustration that I and my co-founder experienced when looking for someone to assist as home with domestic work and childcare. We realised that by solving

the problem of recruiting reliable domestic help for homeowners we could also address the issue of unemployment and underemployment among South Africa's estimated one million domestic workers.

Our biggest achievement is that we are helping to provide an income for thousands of women, which in turn enables them to take care of their families and hopefully contributes to ending a cycle of poverty that many would otherwise be trapped in. In this context we are proud that our efforts specifically help women, and that the majority of our own team is female. Hopefully we can inspire the many young women for whom entrepreneurship, especially in the technical field, may not have seemed an option previously.

The biggest challenge is the perception that women can't be founders or can't be as good at it as men. This notion is also fostered by the lack of appreciation for the sometimes unique soft skills that women have – skills that tend to be overlooked or taken advantage of, but that have been proven to be associated with good leadership. Once we challenge these perceptions, we will value women more in the workplace, appreciate the qualities that female leaders bring to the table, and we will encourage more women to aim for leadership and entrepreneurial positions. This will then filter into the home and family space where women earning an income will be respected and will be more readily assisted with care so that there is a better balance between roles

For us it is a way to leapfrog some of the challenges we face, and to expand our solutions so that we can maximize impact and effectiveness with minimum resources. An example of this is how we have been able to take advantage of a "mobile first approach" in countries like Kenya and South Africa to offer mobile money and e-wallet solutions to people who were previously unbanked. The opportunities span the fields of education, employment, healthcare (especially primary healthcare), agriculture and energy, where technology can broaden access to solutions that improve lives.

88 Business Collective

QUESTIONS

- 1. What inspired you to become an entrepreneur?
- 2. Your biggest achievement as a founder.
- 3. The biggest challenge you are trying to overcome as a female founder.
- 4. How can technology improve the lives of people in Southern Africa?
- 5. Name a network supporting female entrepreneurship in your country.



What does Kasole Secrets Company Ltd do?

Kasole Secrets develops and distributes Glory Sanitary pads made from bamboo. The company also offers consulting services on menstrual hygiene management.



AGE: 33

COMPANY: Kasole Secrets Company Ltd

COUNTRY: Tanzania

WEB: www.hedhisalama.com

It was my personal experience of discomfort during my period, and the level of silence and stigma around menstruation, which prompted me to challenge my status quo. Despite having a background in telecommunications engineering, I decided on a career as an entrepreneur to improve the menstrual experience of women and girls in Tanzania.

My biggest achievement so far has been that I managed to change the narratives around menstruation in my own country.

I have started significant, community-based movements around menstruation, and we are making progress in understanding the importance of involving n and boys in the agenda/movement.

The big challenge for me is how to expand to other countries without necessarily adding much overhead costs and risks to the company. We are still learning about which supply chain model will work best for our business.

I believe 100% that technology is key for accelerating business. However, we really need to know the kind of technology our customers and audiences tend to use the most and capitalize on that.

Tanzania Women Chamber of Commerce (TWCC) http://www.twcc-tz.org/

QUESTIONS

- 1. What inspired you to become an entrepreneur?
- 2. Your biggest achievement as a founder.
- The biggest challenge you are trying to overcome as a female founder.
- 4. How can technology improve the lives of people in Southern Africa?
- 5. Name a network supporting female

What does Lupiya do?
t's an online marketplace





AGE: 31

COMPANY: Lupiya

COUNTRY: Zambia

WEB: www.lupiya.com

I decided to become an entrepreneur when I realized that as a low-income employee I wasn't able to access the funds I needed in order to start my own business. I then began to realize that this was an even bigger problem in Zambia. Many adults were marginalized from formal financial services because of their low income or because they did not have collateral to justify a financial return to formal lenders.

My biggest achievement as a founder so far was being nominated by the US embassy in Lusaka to represent Zambia at the Global Entrepreneurship Summit in Hyderabad (India) in 2017, for which I was shortlisted to participate in the GIST Catalyst Pitch Competition. I became runner-up in the digital and economy sector.

One of the biggest challenges I am trying to overcome is being undermined for the work I do as a female founder as opposed to my male counterparts. Since technology is a male-dominated space, opportunities are sometimes availed to men first before I am even approached, regardless of more experience and the traction we have made with our platform.

Technology can help streamline a lot or processes that would ordinarily take longer to complete. For example, with Lupiya operating online we are able to penetrate communities even in rural areas to provide formal financial services at lower costs than traditional institutions because those institutions incur considerable overhead costs when setting up in rural communities.

WECREATE | ZAMBIA https://www.facebook.com/WECREATE-I-ZAMBIA-790613017695001/

QUESTIONS

- 1. What inspired you to become ar entrepreneur?
- 2. Your biggest achievement as a founder.
- 3. The biggest challenge you are trying to overcome as a female founder
- 4. How can technology improve the lives of people in Southern Africa?
- 5. Name a network supporting female

TATENDA NDAMBAKUWA



What does Shiri do?

Shiri provides web services that allow African farmers to better manage the food production system by sharing equipment, knowledge and marketplaces.



AGE: 25

COMPANY: Shiri

COUNTRY: Zimbabwe

WEB: www.shirifly.org

I enjoy solving problems that I see around me. What inspired me to become an entrepreneur was the issue of figuring out how to provide adequate food and nutrition for future populations. It is a matter that needs urgent attention, making agricultural technology the tool for disruption.

2 Drawing attention to the challenges farmers are facing has been my biggest achievement as a founder so far: Drawing attention to the importance of inspiring and including youth in agriculture, drawing attention to the high rates of malnutrition in Sub-Saharan Africa. And, of course, creating the Shiri mobile application.

QUESTIONS

- 1. What inspired you to become an entrepreneur?
- 2. Your biggest achievement as a founder.
- 3. The biggest challenge you are trying to overcome as a female founder.
- 4. How can technology improve the lives of people in Southern Africa?
- 5. Name a network supporting female entrepreneurship in your country.

The biggest challenge I am trying to overcome is dealing with limited access to funding. Venture capital firms with male partners are more likely to invest in startups run by men. With the majority of the upper echelon business world still being dominated by men, it is difficult to find a support network.

Technology will help Africa leapfrog economic and social development and avoid outdated technologies. Technology inspires creativity, collaboration and innovations that solve problems inherent to Africa. Without technology the rate of development would be very slow.

5 Girls 2.0, www.girls.org.zw

4. CURRENT STATE OF AFFAIRS: WHERE WE ARE NOW

SAIS and Hivos technology entrepreneurs in the age group 18-35 years who are based in the urban centres of Botswana. Malawi, Namibia, South Africa, Tanzania, Zambia and Zimbabwe to share their experiences on the kind of business they operate, the challenges they face and the opportunities they recognise to

Responses were obtained during February-April 2019 by means of an anonymous online survey disseminated through partner innovation hubs and business support organisations.

Technology entrepreneurship among young women remains a niche area in southern Africa at th time of this study. The reasons are addressed in our study. The lack or encouragement for girls to study science, technology, engineering and mathematics (STEM) at school causes the situation that few women venture into these fields. Several women said in the focus groups that entrepreneurship is generally perceived as a male activity and that they had been discouraged to pursue it.

This study focussed on young entrepreneurs in urban centres, and we received 70 responses in total. The tech hubs were the main channels to reach

entrepreneurs. Female networks and projects focusing on female entrepreneurship also assisted in disseminating the survey. According to the hubs' responses, an average of 19% of all the technology



Several women said in the focus groups that entrepreneurship is generally perceived as a male activity and that they had been discouraged to pursue it.



startups is female led. The number of startups in a hub's national network varied from as low as 10 in Lilongwe to 80 in Johannesburg. The number of responses from entrepreneurs per country reflected this and ranged from three in Malawi to 17 in Zambia. We are aware that in the case of Malawi, for instance, there is a limited group of women acting as entrepreneurs in technology. Thus, we want to provide the space to discuss the results despite a low number of responses. All responses have been included in the regional results and the subsequent country profiles.

In addition to the entrepreneurs' responses to the survey, we collected 11 responses from representatives of innovation support organisations such as hubs assisting entrepreneurs in their local innovation ecosystems⁸.

We turned to them to further identify the challenges in the selected ecosystems of Gaborone, Lilongwe, Windhoek, Johannesburg, Pretoria, Cape Town, Dar es Salaam, Lusaka and Harare. Among the hub representatives interviewed, 10 out of 11 organisations provide incubation services for technology startups, and seven mention acceleration of technology-based startups as a service offered. In addition, the services provided by the hubs include coaching9 inhouse (8 out of 11), coworking¹⁰ (7/11) and mentoring (6/11). Four hubs mention that they provide funding or investment for technology startups. Six of the respondents were male, and five were female.

English was the language used in this reaserch. It is recommended to conduct future research on the topic in local languages as well. This would allow a deeper understanding of the experiences of those entrepreneurs who do not speak English or have limited skills in the language.

⁸ The term innovation ecosystem refers to clusters and networks of entrepreneurs, inventors, firms, universities, research labs, government agencies and other institutions, and the resources they bring to bear on the development of new or improved processes, products or services.

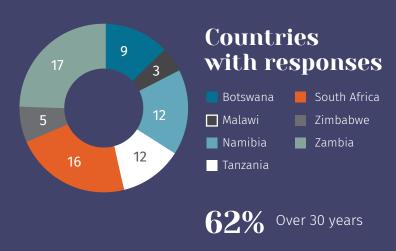
⁹ By coaching we mean supporting a client with training and guidance in order to achieve a professional goal

¹⁰ With a coworking space we mean the shared use of an office space or other working environment by people who are self-employed, as freelancers or startups, typically as to share equipment ideas and knowledge

4.1 REGIONAL RESULTS

We invited technology entrepreneurs aged 18-35 based in the urban centres of Botswana, Malawi, Namibia, South Africa, Tanzania, Zambia and Zimbabwe to share their views on the kind of businesses they operate, the challenges they face and the opportunities they recognise. Responses were solicited through an anonymous online survey and at the time of this mapping, technology entrepreneurship among young women remains a niche group in Southern Africa. We received 70 responses from entrepreneurs. Here is a selected overview of the compiled findings.

Here is a selected overview of the regionally compiled results from all seven sample countries. Entrepreneurship ecosystems in Southern Africa have been developing for different times and at different rates, so it's only natural some variance occurs between the ecosystems. The results from individual ecosystems are showcased in the country profiles in Chapter 4.2.



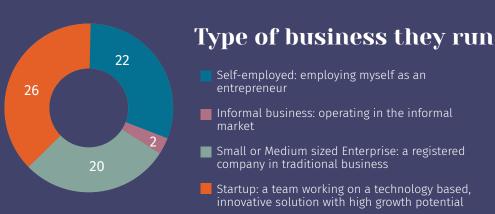


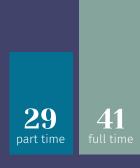


59% has childcare responsibilities









Runs their business fulltime or part-time (out of the total of 70)





Top 3 fields in which the business is operating

20%
ICT (Hardware or software)

19% Agriculture 17%
Education



57%Business is 2 years old or younger

Looking to scale the business

 $32 \rightarrow$ Yes, to other cities in my country

29 \rightarrow Yes, abroad (within the SADC region)

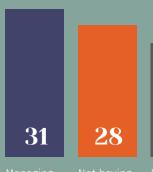
12 → Yes, abroad (the EU or the Americas)

10 → Yes, abroad (within SADC + Asia)

 $\mathbb{B} o \mathbb{N}$ No, I just want to grow my business in my city

66

TOP 5 PERSONAL CHALLENGES WOMEN FACE WHEN BEING A TECH ENTREPRENEUR*



a team, finding the right talent Not having enough mentors o advisors

26

Balancing between running the business and my day 24

Being underestimated or not respected due to being female 22

Balancing between running the business and the responsibilities of a spouse and/ or parent "I feel overwhelmed
by all the things that I need
to do to grow my business.
Having mentorship or guidance
would help me to make the
right decisions and overcome
a lot of the fear around my
entrepreneurial journey."
Online survey response

Has experienced or witnessed sexual harrassment

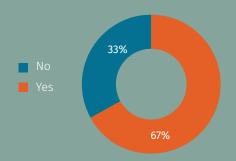
50%

40%

10% Maybe

^{*} The respondents were asked to mention the three most pressing challenges you as an entrepreneur have experienced or are experiencing personally. The options given were: Facing cultural stigma of being an entrepreneur (it is not a valued career choice in my community, Balancing between running the business and the responsibilities of a spouse and/or parent, Balancing between running the business and my day job, Being underestimated or not respected due to being female, Not having peer-support from people operating in the same field, Not having enough mentors or advisors to support me in my business, Not having rolemodels from my field, Lack of skills in efficient work habits and time management, Managing a team, finding the right people to work with.





Thinks there are challenges women face in the technology entrepreneurship that are different from the challenges men face.

In addition to the hearing the voice of the entrepreneurs, we collected 11 responses from innovation support organisations such as hubs, who we turned to in order to further map out the challenges in the selected entrepreneurship ecosystems of Gaborone, Lilongwe, Windhoek, Johannesburg, Pretoria, Cape Town, Dar es Salaam, Lusaka and Harare. How large is the share of women in these ecosystems and what is the level of access to services?

ENTREPRENEURSHIP ECOSYSTEMS



19%
Female-driven startups in network and/or members at hubs



76% female employees of hubs





RANKING OF ACCESS TO BUSINESS SERVICES*

Access to office space	Access to business support (registering the company, support in legal, fiscal or other matters)	Access to seed funding to kick-start the business	Access to mentors or mentor networks	Access to incubation or acceleration programs suitable for my business	Access to talent (co-founders, members to join the business)	Access to clients
2,7	3,2	2	2	2,4	2,5	3,1
2,7	3	1.8	2.8	3	2.7	3.2

^{1 =} poor access, 5 = very good access





The following data is generated by the 'Venture Finance in Africa' research, 2018. VC4A Venture Finance in Africa research captures the performance of early-stage, high growth ventures from Africa and the activity of early-stage investors. To learn more about the research, see: https://vc4a.com/venture-finance-in-africa/

Average external investment secured



USD 343.566

All-male teams

USD 219,790



All-female teams

USD 105.903



Mixed teams

Percentage of ventures currently generating revenue



teams





Mixed teams

Number of months to receive first revenue after moment of registration







Percentage of ventures currently creating jobs

All-male teams

63.70%

60.50%

All-female teams

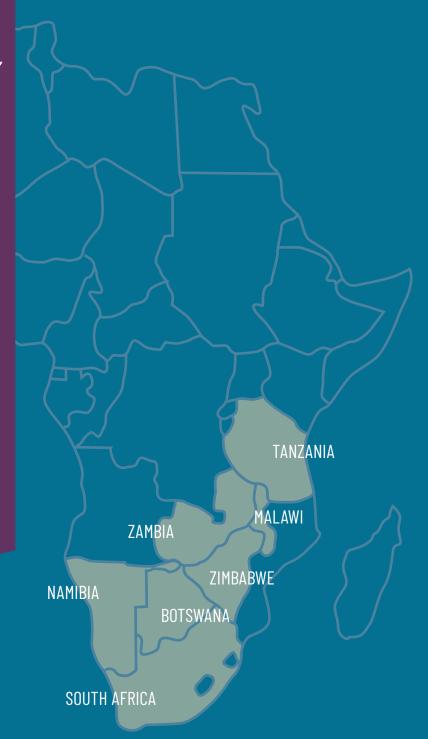
62.50%

Mixed

4.2 COUNTRY PROFILES

This section presents the results from the samples obtained in seven target countries. Average responses on a national level have been compiled and are presented in the form of a persona.

In addition, we include the top five challenges of being an entrepreneur in technology which the respondents have personally experienced. The results are based on online surveys conducted among entrepreneurs in Botswana, Malawi, Namibia, South Africa, Tanzania, Zambia and Zimbabwe.



BOTSWANA



- Is over 30 years old
- Has a Bachelor's Degree or higher
- Has an income of less than USD 500 per month
- Does not have children or spousal responsibilities
- Has a startup
- Company is younger than two years
- Has a team of four people
- Is solving a social problem
- Operates in ICT
- Wants to expand to other cities in the country

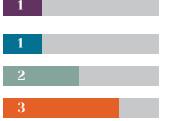
ACCESS TO SERVICES ACCORDING TO ENTREPRENEURS AND HUBS IN BOTSWANA*

	Access to office space	Access to business support (registering the company, support in legal, fiscal or other matters)	Access to seed funding to kick-start the business	Access to mentors or mentor networks	Access to incubation or acceleration programs suitable for my business	Access to talent (co-founders, members to join the business)	Access to clients
According to entrepreneurs	3,4	3,2	2	2	2,4	2,5	3,1
According to hubs	2	2,5	1,5	2,5	3	3,5	3,5

^{* 1 =} poor access, 5 = very good access

THE TOP 5 CHALLENGES THAT ENTREPRENEURS HAVE PERSONALLY EXPERIENCED OR CONTINUE TO EXPERIENCE **

- 1. Balancing between running the business and the responsibilities of a spouse and/ or parent
- 2. Being underestimated or not respected due to being female
- 3. Lack of skills in efficient work habits and time management
- 4. Not having enough mentors or advisors to support me in my business
- 5. Managing a team, finding the right people



Others mentioned: Not having peer-support from people operating in the same field, having to deal with cultural stigma for being an entrepreneur (not a respected career choice in the community), lack of established role-models, lack

- ** The respondents were asked to select the three most pressing personal challenges they
- have experienced or are currently experiencing. The options given were:
 (i) Facing cultural stigma for being an entrepreneur (it is not a respectable career choice in my community), (ii) Finding a balance between running the business and the responsibilities as a spouse and/or parent, (iii) Balancing between running the business and my day job.
- (iv) Being underestimated or not respected due to being female, (v) Not having peer-support from people operating in the same field, (vi) Not having enough mentors or advisors to support me in my business, (vii) Not having role models from my field, (viii) Lack of skills in work efficiency and time management, (x) Managing a team, finding the right people to work with.

CHALLENGES EXPERIENCED BY FEMALE ENTREPRENEURS ARE **DUE TO CULTURAL REASONS*****

* 1 = not at all, 5 = very much



FIELDS WITH THE MOST GROWTH POTENTIAL



MALAWIAN PERSONA





- Is under 30
- Has a Bachelor's Degree or higher
- Has an income of more than 500 USD
- Has children or spousal responsibilities
- Has an SME
- Company younger than 1 year
- Has a team of 8 employees
- Is solving a societal problem
- Is looking to scale to other cities in the country

ACCESS TO SERVICES ACCORDING TO ENTREPRENEURS AND HUBS IN MALAWI*

	Access to office space	Access to business support (registering the company, support in legal, fiscal or other matters)	Access to seed funding to kick-start the business	Access to mentors or mentor networks	Access to incubation or acceleration programs suitable for my business	Access to talent (co-founders, members to join the business)	Access to clients
According to entrepreneurs	2	3,3	1,3	2,6	3,3	3,3	2,3
According to hubs	2	3	2	2	2	1	2

^{* 1 =} poor access, 5 = very good access

THE TOP 5 CHALLENGES THAT ENTREPRENEURS HAVE PERSONALLY EXPERIENCED OR **CONTINUE TO EXPERIENCE ****

1. Balancing between running the business and the responsibilities of a spouse and/

2. Being underestimated or not respected due to being female

3. Lack of skills in efficient work habits and time management

4. Not having enough mentors or advisors to support me in my business

5. Managing a team, finding the right people

Others mentioned: Facing cultural stigma of being an entrepreneur (it is not a valued career choice in my community)

** The respondents were asked to select the three most pressing personal challenges

they have experienced or are currently experiencing. The options given were:
(i) Facing cultural stigma for being an entrepreneur (it is not a respectable career choice in my community), (ii) Finding a balance between running the business and the responsibilities as a spouse and/or parent, (iii) Balancing between running the business and my day iob.

and my day Job, (iv) Being underestimated or not respected due to being female, (v) Not having peer-support from people operating in the same field, (vi) Not having enough mentors or advisors to support me in my business, (vii) Not having role models from my field, (viii) Lack of skills in work efficiency and time management, (x) Managing a team, finding the right people to work with.

FIELDS WITH THE MOST GROWTH POTENTIAL



CHALLENGES EXPERIENCED BY FEMALE ENTREPRENEURS ARE DUE TO CULTURAL REASONS***

* 1 = not at all, 5 = very much







- Is under 30
- Has a Bachelor's degree or higher
- Has an income level less than 500 USD per month
- Does not have children or spousal responsibilities
- Has a startup
- Company younger than 2 years
- Has a team of 2 people
- Is solving a societal problem
- Is in food and nutrition
- Is looking to scale to other cities in Namibia

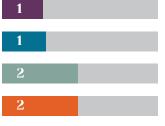
ACCESS TO SERVICES ACCORDING TO ENTREPRENEURS AND HUBS IN NAMIBIA*

	Access to office space	Access to business support (registering the company, support in legal, fiscal or other matters)	Access to seed funding to kick-start the business	Access to mentors or mentor networks	Access to incubation or acceleration programs suitable for my business	Access to talent (co-founders, members to join the business)	Access to clients
According to entrepreneurs	2,5	2,8	1,8	2,1	2,2	2,5	2,6
According to hubs	2,5	3	2	2	2,5	3	3

^{* 1 =} poor access, 5 = very good access

THE TOP 5 CHALLENGES THAT ENTREPRENEURS HAVE PERSONALLY EXPERIENCED OR **CONTINUE TO EXPERIENCE ****

- 1. Managing a team, finding the right people to work with
- 2. Balancing between running the business and my day job
- 3. Not having peer-support from people operating in the same field
- 4. Not having enough mentors or advisors to support me in my business
- 5. Lack of skills in efficient work habits and time management



Others mentioned: Facing cultural stigma of being an entrepreneur (it is not a valued career choice in my community), Being underestimated or not respected due to being female, High costs of tools and materials to upscale, Not having rolemodels from my field, Balancing between running the business and the responsibilities of a spouse and/or parent.

** The respondents were asked to select the three most pressing personal challenges they

have experienced or are currently experiencing. The options given were:
(i) Facing cultural stigma for being an entrepreneur (it is not a respectable career choice in my community), (ii) Finding a balance between running the business and the responsibilities as a spouse and/or parent, (iii) Balancing between running the business and my day job.

(iv) Being underestimated or not respected due to being female, (v) Not having peer-support from people operating in the same field, (vi) Not having enough mentors or advisors to support me in my business, (vii) Not having role models from my field, (viii) Lack of skills in work efficiency and time management, (x) Managing a team, finding the right people to work with.

CHALLENGES EXPERIENCED BY FEMALE ENTREPRENEURS ARE **DUE TO CULTURAL REASONS*****

* 1 = not at all, 5 = very much



FIELDS WITH THE MOST GROWTH POTENTIAL



SOUTH AFRICA

SOUTH AFRICAN PERSONA



- Is over 30
- Has a Bachelor's degree or higher
- Has an income level of over 500 USD per month
- Has children or spousal responsibilities
- Is self-employed
- Company older than 3 years
- Has a team of 3 people
- Is solving a societal problem
- Is looking to grow within the SADC region

ACCESS TO SERVICES ACCORDING TO ENTREPRENEURS AND HUBS IN SOUTH AFRICA*

	Access to office space	Access to business support (registering the company, support in legal, fiscal or other matters)	Access to seed funding to kick-start the business	Access to mentors or mentor networks	Access to incubation or acceleration programs suitable for my business	Access to talent (co-founders, members to join the business)	Access to clients
According to entrepreneurs	2,8	2,3	1,5	1,6	1,8	2	2,8
According to hubs	3,3	3,3	2,3	2,6	3,3	3,3	3,6

^{* 1 =} poor access, 5 = very good access

THE TOP 5 CHALLENGES THAT ENTREPRENEURS HAVE PERSONALLY EXPERIENCED OR **CONTINUE TO EXPERIENCE ****

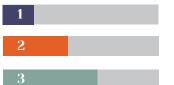
1. Not having enough mentors or advisors to support me in my business

2. Balancing between running the business

3. Being underestimated or not respected due to being female

4. Balancing between running the business and the responsibilities of a spouse and/ or parent

5. Managing a team, finding the right people



Others mentioned: Not having peer-support from people operating in the same field, Lack of skills in efficient work habits and time management, Not having rolemodels from my field, Facing cultural stigma of being an entrepreneur (it is not a valued career choice in my community).

** The respondents were asked to select the three most pressing personal challenges

they have experienced or are currently experiencing. The options given were:
(i) Facing cultural stigma for being an entrepreneur (it is not a respectable career choice in my community), (ii) Finding a balance between running the business and the responsibilities as a spouse and/or parent, (iii) Balancing between running the business and my day iob.

(iv) Being underestimated or not respected due to being female, (v) Not having peer-support from people operating in the same field, (vi) Not having enough mentors or advisors to support me in my business, (vii) Not having role models from my field, (viii) Lack of skills in work efficiency and time management, (x) Managing a team, finding the right people to work with.

FIELDS WITH THE MOST GROWTH POTENTIAL

and my day job



CHALLENGES EXPERIENCED BY FEMALE ENTREPRENEURS ARE DUE TO CULTURAL REASONS***

* 1 = not at all, 5 = very much



TANZANIA



- Is over 30
- Has a bachelor's degree or higher
- Income level of under 500 USD
- Has children
- Has a startup
- Company younger than 2 years
- Has a team of 5 people
- Is solving a societal problem
- Is looking to scale to the SADC region

ACCESS TO SERVICES ACCORDING TO ENTREPRENEURS AND HUBS IN TANZANIA*

	Access to office space	support (registering the company, kick-		Access to seed funding to mentors or mentor housiness networks		Access to talent (co-founders, members to join the business)	Access to clients	
According to entrepreneurs	2,6	2,9	2,1	3,1	2,9	3	3,3	
According to hubs	3	3	2	4	5	3	4	

^{* 1 =} poor access, 5 = very good access

THE TOP 5 CHALLENGES THAT ENTREPRENEURS HAVE PERSONALLY EXPERIENCED OR **CONTINUE TO EXPERIENCE ****

- 1. Managing a team, finding the right people to work with
- 2. Balancing between running the business and my day job
- 3. Not having enough mentors or advisors to support me in my business
- 4. Lack of skills in efficient work habits and time management
- 5. Balancing between running the business and the responsibilities of a spouse and/



Others mentioned: Not having peer-support from people operating in the same field, Being underestimated or not respected due to being female, Facing cultural stigma of being an entrepreneur (it is not a valued career choice in my community), Not having rolemodels from my field.

** The respondents were asked to select the three most pressing personal challenges they

have experienced or are currently experiencing. The options given were:
(i) Facing cultural stigma for being an entrepreneur (it is not a respectable career choice in my community), (ii) Finding a balance between running the business and the responsibilities as a spouse and/or parent, (iii) Balancing between running the business and my day job.

(iv) Being underestimated or not respected due to being female, (v) Not having peer-support from people operating in the same field, (vi) Not having enough mentors or advisors to support me in my business, (vii) Not having role models from my field, (viii) Lack of skills in work efficiency and time management, (x) Managing a team, finding the right people to work with.

CHALLENGES EXPERIENCED BY FEMALE ENTREPRENEURS ARE **DUE TO CULTURAL REASONS*****

* 1 = not at all, 5 = very much



FIELDS WITH THE MOST GROWTH POTENTIAL



ZAMBIA

ZAMBIAN PERSONA



- Is over 30
- Has a Bachelor's degree or higher
- Income level over 500 USD
- Has children and spousal responsibilities
- Has an SME
- Company younger than 2 years
- Has a team of 3 people
- Is solving a societal problem
- Is in agriculture
- Is looking to scale within the country

ACCESS TO SERVICES ACCORDING TO ENTREPRENEURS AND HUBS IN ZAMIBIA*

	Access to office space	Access to business support (registering the company, support in legal, fiscal or other matters)	Access to seed funding to kick-start the business	Access to mentors or mentor networks	Access to incubation or acceleration programs suitable for my business	Access to talent (co-founders, members to join the business)	Access to clients
According to entrepreneurs	2,4	2,9	1,6	2,9	2,8	2,6	2,9
According to hubs	3,5	3,5	1	3,5	2,5	2,5	3,5

^{* 1 =} poor access, 5 = very good access

THE TOP 5 CHALLENGES THAT ENTREPRENEURS HAVE PERSONALLY EXPERIENCED OR CONTINUE TO EXPERIENCE **

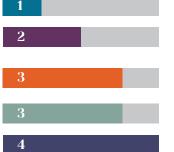
1. Managing a team, finding the right people to work with

2. Lack of skills in efficient work habits and time management

3. Balancing between running the business and the responsibilities of a spouse and/or parent

4. Being underestimated or not respected due to being female

5. Balancing between running the business and my day job



Others mentioned: Not having enough mentors or advisors to support me in my business, Not having peer-support from people operating in the same field, Facing cultural stigma of being an entrepreneur (it is not a valued career choice in my community), Balancing between running the business and other competing chores, Getting standards certification for the products, Not having rolemodels from my field, Financial support.

** The respondents were asked to select the three most pressing personal challenges they have experienced or are currently experiencing. The options given were:

(i) Facing cultural stigma for being an entrepreneur (it is not a respectable career choice in my community), (ii) Finding a balance between running the business and the responsibilities as a spouse and/or parent, (iii) Balancing between running the business and my day job,

(iv) Being underestimated or not respected due to being female, (v) Not having peersupport from people operating in the same field, (vi) Not having enough mentors or advisors to support me in my business, (vii) Not having role models from my field, (viii) Lack of skills in work efficiency and time management, (x) Managing a team, finding the right people to work with.

FIELDS WITH THE MOST GROWTH POTENTIAL



CHALLENGES EXPERIENCED BY FEMALE ENTREPRENEURS ARE DUE TO CULTURAL REASONS***

* 1 = not at all, 5 = very much



ZIMBABWE

ZIMBABWEAN PERSONA



- Is over 30
- Has a bachelor's degree or higher
- Income level of under 500 USD
- · Has children
- Has a startup
- Company younger than 2 years
- Has a team of 5 people
- Is solving a societal problem
- Is in ICT
- Is looking to scale to the SADC region

ACCESS TO SERVICES ACCORDING TO ENTREPRENEURS AND HUBS IN ZIMBABWE*

	Access to office space	Access to business support (registering the company, support in legal, fiscal or other matters)	Access to seed funding to kick-start the business	Access to mentors or mentor networks	Access to incubation or acceleration programs suitable for my business	Access to talent (co-founders, members to join the business)	Access to clients
According to entrepreneurs	2,8	2,2	2	2	2,2	2,6	3
According to hubs	No hubs response recorded.	No hubs response recorded.	No hubs response recorded.	No hubs response recorded.	No hubs response recorded.	No hubs response recorded.	No hubs response recorded.

^{* 1 =} poor access, 5 = very good access

THE TOP 5 CHALLENGES THAT ENTREPRENEURS HAVE PERSONALLY EXPERIENCED OR CONTINUE TO EXPERIENCE **

1. Balancing between running the business and the responsibilities of a spouse and/or parent

Facing cultural stigma of being an entrepreneur (it is not a valued career choice in my community)

3. Not having enough mentors or advisors to support me in my business

4. Balancing between running the business and my day job

5. Being underestimated or not respected due to being female

1

1

1

Others mentioned: Not having peer-support from people operating in the same field, Not having rolemodels from my field, Lack of skills in efficient work habits and time management, Managing a team, finding the right people to work with.

** The respondents were asked to select the three most pressing personal challenges they have experienced or are currently experiencing. The options given were:

(i) Facing cultural stigma for being an entrepreneur (it is not a respectable career choice in my community), (ii) Finding a balance between running the business and the responsibilities as a spouse and/or parent, (iii) Balancing between running the business and my day job,

(iv) Being underestimated or not respected due to being female, (v) Not having peersupport from people operating in the same field, (vi) Not having enough mentors or advisors to support me in my business, (vii) Not having role models from my field, (viii) Lack of skills in work efficiency and time management, (x) Managing a team, finding the right people to work with.

CHALLENGES EXPERIENCED BY FEMALE ENTREPRENEURS ARE DUE TO CULTURAL REASONS***

* 1 = not at all, 5 = very much



FIELDS WITH THE MOST GROWTH POTENTIAL



5. EXPERTS' CORNER

Several initiatives to support female entrepreneurs in southern Africa already exist. It is in the interest of aspiring and early-stage entrepreneurs to be aware of these and to learn from those who have travelled the same path before them. Learning from experience is also crucial when support organisations are designing new interventions for the benefit of women.



"If we do
not share our
stories and shine
a light on
inequities, things
will not change."

Ellen Pao



ZVIKOMBORERO TANGAWAMIRA BIOFISA II



For this study, SAIS and
Hivos Southern Africa
interviewed seven experts.



NAMBULA KACHUMI WECREATE ZAMBIA



LAUREN DALLAS
FUTURE FEMALES



CAROLYNE EKYARISIIMA

APPS AND GIRLS



PAULINE KOELBL-MUJAWAMARIYA



ALEXANDRA FRASER
FRASER CONSULTING



MARNIX VAN HOLLAND HIVOS SOUTHERN AFRICA



TANGAWAMIRA

TITLE: Programme Manager,
BioFISA II

ORGANISATION: Nepad

www.nepadsanbio.org



When setting up the FemBioBiz programme, what did you identify as the most common challenges that women have to face as entrepreneurs in southern Africa?

The low numbers of women in STEM translate to fewer female entrepreneurs in the biotech space. The challenges they face include access to finance, access to networks and technologies to help them grow and scale their businesses. In addition, women need to strike a balance between their household responsibilities and their new venture, which in itself requires significant attention. The limited

number of women in this sector also means that there are hardly any role models and mentors who can support these businesses as they grow. This poses a challenge as newcomers may make mistakes in their businesses that other women who have walked similar paths have already learnt from. Another challenge particularly relevant in the African context is the culture which may put men above women in social settings. As a result, some women lack confidence when they compete against men in an already highly male-dominated environment.

Are challenges that women face in technology entrepreneurship different from the challenges that men encounter? If so, why do you think that is?

Yes, in my opinion, the main challenges that are unique to women are the cultural dimension, balancing working life and the lack of role models and mentors who can relate, and lastly the low number of women taking STEM subjects.

What would it take to enhance the role of female entrepreneurs in the technology field (on a policy level, culturally or otherwise)?

A policy directive is needed to incentivise and encourage the girls to take STEM subjects from primary to tertiary level. Platforms for women to network, share knowledge and engage should be encouraged to allow for cross-fertilisation among women in similar fields. During the FEMBioBiz programme, we found that the networks created by women at country or regional level allowed them to collaborate, gain contacts from other markets for their businesses and to seek and share solutions with like-minded people.

Anything else you'd like to share about female technology entrepreneurship?

For the biotech sector, in particular, an entrepreneur's road can be very long and full of challenges, regardless of gender. Additional challenges that female entrepreneurs have to deal with make their entrepreneurship journeys even more difficult, yet the solutions developed in the sector have the potential to address some of the critical disease and nutrition challenges we face globally. More effort is needed to enhance or create ecosystems that can support these female technology entrepreneurs in a systematic way and for the long run rather than short-term initiatives done in an ad hoc manner.



TITLE: Executive Director

ORGANISATION: WECREATE

www.zambia.wecreatecenter.org



What do you think are the most common challenges women face as entrepreneurs in the technology field?

Challenges faced by women tech entrepreneurs are diverse, ranging from a lack of role models, educational barriers, limited exposure to the industry and limitations in acquiring skills to limited options at the entry point. This is in addition to primary gender and systemic barriers coupled with stereotypes and perceptions surrounding women's leadership and progression in this field. Furthermore, the work-life imbalance has made it even harder for women to steadily and consistently build careers in the tech industry, as this requires full dedication and long hours.

Are challenges that women face in technology entrepreneurship different from the challenges that men encounter? If so, why do you think that is?

Challenges that both genders face are similar, but they become more complex for women as they progress in their career or business. For example, it gets harder for a woman in tech to raise funding as most sources may prefer male-led tech enterprises because they are more confident that the business will succeed. Secondly, tech startups founded by women will most of the time end up with a higher number of men in their team because it's harder to find the right skills, given the low participation of women in tech. The starting point to enter a tech career or business is also different for men and women. Men can connect to professional networks faster, raise capital and build the right teams, all of which helps them to go to market faster. These challenges are part of the social-cultural barriers.

What would it take to enhance the role of female entrepreneurs in the technology field (on a policy level, culturally or otherwise)?

There is a need for more female role models, more opportunities for funding female techies and for capacity building, as well as improved policies that encourage the participation of girls and women in fields related to science and technology. Programmes that specifically focus on mentorship and building skills and opportunities for women in tech are of critical importance. Exposure to local, regional and global best practices is also vital.

Anything else you'd like to share about female technology entrepreneurship?

Women who run technology or tech-enabled businesses in Zambia usually do not start out with such products in mind. They are driven by necessity along the way, which makes the foundation poor and choices limited. There is a need to get more women and youth to recognize the potential in building a tech business and career.



TITLE: Co-Founder, Future Females

ORGANISATION: Future Females

www.futurefemales.co



What do you think are the most common challenges women face as entrepreneurs in the technology field?

We recently conducted a survey on the Future Females community, to understand the biggest challenges holding women back from developing their businesses. Over 50% of the respondents listed 'Mindset & Confidence' as the number one roadblock. This comes from a number of cultural and social factors and is not exclusive to female entrepreneurs in the technology field.

Another major challenge is the lack of visible female role models, with around 20% of the respondents to our survey listing a lack of mentorship/role models as a major roadblock in their entrepreneurial journey. It's not that there are not successful female entrepreneurs out there, but typically their stories are not shared or promoted, and so it is harder for the next generation of female entrepreneurs to follow in their footsteps.

Are challenges that women face in technology entrepreneurship different from the challenges that men encounter? If so, why do you think that is?

Some challenges in technology entrepreneurship are standard

across genders, such as access to entrepreneur education, structured programmes and resources like skilled staff and mentors. However, there are some challenges specific to women:

- 1) Control of and access to funding: In 2018 just 2.2% of the \$130 billion total of VC money went to femalefounded businesses¹¹ – there are just not enough female VCs with decision-making power or support for female-founded businesses pitching for the available funds.
- 2) Work and home commitments: Women play so many roles mother, wife, entrepreneur - and it is still the case (particularly in countries in Sub-Saharan Africa) that women are expected to play the traditional role. It is less acceptable for a woman to prioritise her business or career over her family commitments. This not only results in few females participating in entrepreneurship and a higher drop-out rate but also in increased fear of failure - there's almost a perception that the stakes are higher when a woman takes the risk.
- 3) Lack of support in the ecosystem:
 Women thrive in supportive
 networks, and currently the
 entrepreneur ecosystem at large,
 and specific opportunities such as
 structured incubator programmes

¹¹ Source: "Funding For Female Founders Stalled at 2.2% of VC Dollars in 2018" [accessed 8-5-2019] http://fortune.com/2019/01/28/funding-femalefounders-2018/)



Technology keeps
evolving every day,
and to keep on top of
the game one needs
to stay up-to-date.

are typically dominated by men – we still have a long way to go before equality is achieved in these respects.

What would it take to enhance the role of female entrepreneurs in the technology field (on a policy level, culturally or otherwise)?

At Future Females, we have identified five key pillars that, if focussed on, we believe would enhance the participation and success of female entrepreneurs.

Community - Online and offline structures that bring like-minded female entrepreneurs together to support, inspire and collaborate. Inspiration – Highlight and promote successful female entrepreneurs as role models, encouraging women to enter STEM & entrepreneurship paths. This can be started simply, e.g. by ensuring that women are adequately represented on stages and panels for industry events. Education - Improve access to entrepreneurship skills programmes and ensure that the available programmes cater to the needs of the 'holistic entrepreneur', i.e. support women to develop themselves as entrepreneurs, as well as to develop their current business. Mentorship – Create constructs where women can support and uplift other women in a personal 1:1 sets; create success paths and accelerate female entrepreneurs along these. Funding – Improve access to risk capital, whether VC, angel investing,

bank loans or other, with policies to rebalance the distribution of these funds

How does Future Females ease these challenges for female entrepreneurs?

At Future Females our current focus is on:

- 1) Community We operate a chapter-based model, recruiting ambassadors around the world who create physical, digital and emotional spaces where women can feel supported to try, to fail and to win. We host monthly events and workshops in each of our chapters currently 18 around the world, with a goal of 35 in 2019. Apart from this, we facilitate collaboration across borders, sharing stories from around the world to encourage women to think and execute bigger.
- 2) Inspiration Future Females is a storytelling platform, highlighting successful entrepreneurs and women in business at every event, and across our social platforms. We share authentic stories (the good and the bad) to encourage and inspire our members, whether they are at stage 1 of

their entrepreneurship journey, or further down the road looking to what's next.

3) Education - A core value at Future Females is 'take action' - we are creating a community of doers, and we support them with practical entrepreneurship skills to ensure they can take the right action. We have developed a three-month virtual incubator called the Future Females Business School, which supports women in the idea phase to validate their concepts and bring their dream businesses to life. This programme draws from experts around the world to offer education on both personal and business development and has a practical focus on building towards profit.

In 2019 we will be launching our membership offering, driving even deeper engagement, connections and impact for our growing member base.



CAROLYNE EKYARISIIMA

TITLE: Founder & CEO

ORGANISATION: Apps and Girls

https://www.appsandgirls.com/



What do you think are the most common challenges women face as entrepreneurs in the technology field?

Being a woman and an entrepreneur is very tricky, especially if you are married with children. In my case, for instance, I can say I have two full-time jobs - one as founder and CEO of Apps and Girls, and another as a wife and mother, plus a parttime job taking care of myself and family members, including siblings and parents. All of this is very tiring. Balancing life in general as a wife, a mother, a boss and a scholar is not easy - technology keeps evolving every day, and to keep on top of the game one needs to stay up-to-date. There is a lack of peer-support. We are very few female founders in technology, and the space becomes lonely. There is also a lack of mentors and role models in the ecosystem, and there is no female entrepreneurs' network that provides support. In Tanzania, for example, female technology entrepreneurs are just a handful, and all of them are young, as it's quite a new concept. This makes it hard for them to get role models or mentors who can share the same challenges and lessons. We lack platforms where female tech entrepreneurs can talk, learn and network.

Due to cultural stereotypes and attitudes, some male staff members feel that taking orders from ladies is not suitable, and this causes setbacks in the organisation. It takes time to change such attitudes. We should not forget that we still have a percentage of males who feel it's impossible for a woman to know more than him or challenge him. Sometimes such attitudes cripple work and creativity.

Women usually face the challenge of skills management and a lack of business or entrepreneurial knowledge to help structure everything and competitively take your product to market. This is knowledge which we don't get from universities, it's either one invests much time reading, taking short courses, or just diving into it with a passion – as I did at first, and it almost cost me my venture. For example, there are very few places in Tanzania where one can acquire such business acumen, and that is a challenge. I was lucky when I started in that I was supported by the Reach for Change incubator - a capacity building programme which helped a lot with my venture's establishment. It's also a struggle for women who do not have a

technological background because they must be knowledgeable about the technologies and the evolving trends; otherwise they might not be able to make informed decisions for their business.

Most women fail to get loans or financing from banks and other financiers because banks need collateral, be it a house or a piece of land. Typically, however, in most families, the property is registered under the husband's or the family's male representatives' name.

Are challenges that women face in technology entrepreneurship different from the challenges that men encounter? If so, why do you think that is?

The challenges are not the same.

Most of the challenges I have explained above are gender-based. However, men do face their challenges. They might have difficulty, for instance, asking their fellow men for help with their business because they are expected to be successful from the start.

What would it take to enhance the role of female entrepreneurs in the technology field (on a policy level, culturally or otherwise)?

Culturally we would need awareness, perhaps about stereotypes and attitudes. This could be in the form of simple campaigns on social media or topics included in conferences etc. Events/networks or conferences featuring women

entrepreneurs in the tech field would bring together women, key players, e.g. policy enforcers, aspiring women tech entrepreneurs and men to have discussions on the issue and also give room to the women to speak out, share and learn as they inspire more females to get on board. Women networks in the region would harness mentorship, aspirations, inspirations, women-towomen support and knowledge. I would also advocate support and capacity building programmes or incubators which are tailored for female tech entrepreneurs. I think financial institutions should loosen up restrictions and conditions of access to financing for technology startups because such access is one of the biggest challenges and one of the main reasons why tech-driven startups do not make it. They can't access loans from banks or microfinance because they don't have collateral. Customer onboarding with technology

products might take a while, and therefore, these startups should benefit from a longer grace period before having to start repaying loans.

Anything else you'd like to share about female technology entrepreneurship?

Regardless of the need to be up-to-date in the field, tech entrepreneurship is very flexible compared to other businesses. This is something one can run from home, so one may not need a physical office or space at first. As long as you got the technology right, you are good to go. Even schoolgirls or mothers who have tight family schedules can run technology entrepreneurship. All you need to do is conduct enough research to validate the product demand and to be aware of the delivery channels for the service as well as the business model around your idea. I would encourage women to take this up as it is something you may be able to run while you are at home with your children.



need awareness,
perhaps about
stereotypes and



TITLE: Freelance Innovation Catalyst, Strategic Advisor, Angel Investor and PROWAH Co-Founder/VP Operations

> ORGANISATION: PROWAH; GreenTec Capital Africa Foundation

www.prowah.org www.greentec-foundation.com

What do you think are the most common challenges women face as entrepreneurs in the technology field?

Before listing challenges, it is important first to reiterate the fact that women are breaking barriers in the field of technology and innovation, not just in Africa but globally. Concerning challenges, I want to highlight the following five:

- Limited access to funding: According to the recent Melinda Gates article in Wired UK12 "82% of VCs are owned by males, 70% of who are white, and they tend to fund white entrepreneurs". It is a well-known fact that people tend to support/fund people of their own "tribe". In this case, because VCs are dominated by white males, they tend to fund startups whose owners are white males. Thus, the gender funding gap is real. It is even wider, however, when one zooms into African women and their access to investments.
- Social expectations / cultural bias: Societies expect women to behave in certain ways. 'Good' women are expected to hang out in "respectable" places and be home by a specific time of day. On the other hand, networking

platforms or venues which are often dominated by males tend to take place where "good women" are not supposed to be and continue until late when "good women" are supposed to be home. As this is a men's world, women have to adjust to it or miss out. There is a mismatch between social norms and what it takes for any entrepreneur to succeed. This poses a big challenge for African women who want respect but still need to network and grow their ventures.

- Networks: Networks are the valuable modern currency because building high value and a support network is key for succeeding. It is often a matter of "It is not what you know but who you know". As African entrepreneurship ecosystems are still developing, more role models and mentors are needed to support women tech entrepreneurs who are often swimming against the stream.
- Work-Life balance: Women usually have to choose between having a family and running their own business. This is a challenge that male entrepreneurs don't have to worry about. We all know that it should not be either-or, but the reality is that women still struggle

¹² Wired UK: "Melinda Gates: 'The VC industry funnels money to white men"' [accessed 10-5-2019]: https:// www.wired.co.uk/article/melinda-gates-venturecapital-diversity

with this balance because mostly they are expected to choose, and it takes guts not to give up and settle for one option. Here, too, role models are needed who are ready to share how they managed to do both successfully – and if so, what are the trade-offs?

- Fear of failure: While this is a challenge for any entrepreneur regardless of gender, women struggle more because of the compounded social challenges. Entering a field dominated by males sometimes makes women feel insecure. It is important not to let that internal insecurity stop them from dreaming big. As is often pointed out, women entrepreneurs have to remind themselves that failure is part of the process.

Are challenges that women face in technology entrepreneurship different from the challenges that men encounter? If so, why do you think that is?

In some cases, yes, and examples have already been mentioned. One of the key challenges is to ensure that women stay in the pipeline. It should not just be about opening up opportunities for women to start a tech business, and about increasing the number of early-stage companies owned by women. It is also important to keep in mind that tech entrepreneurship remains a male-dominated space, where now they must make room for women who are already breaking barriers and support them to grow and scale their ventures so that they become role models for others.

With regard to pitching and raising funds, it has been noted that women are more conservative and don't overstate projections while men tend



Entering a field dominated by males sometimes makes women feel insecure.

to inflate their numbers. In general, women entrepreneurs say that they struggle to be taken seriously. Sometimes, instead of focusing on the business, investors tend to focus on the look, manners and outfits of women tech entrepreneurs, which is something that does not happen to the male peers.

Unlike men, who take and own any compliment they can get, women don't always own their accomplishments but rather tend to downplay their worth. Unlike men who use "I" comfortably when they own accomplishments, women tend to use "we". As a result, others do not know what women can accomplish on their own, and therefore, they might not get included in the right lists to access more opportunities for their businesses.

Lastly, networking in maledominated spaces remains a challenge even for extroverted, smart, articulated and goal-oriented women entrepreneurs. This is again linked to social norms and the need to have to swim upstream.

What would it take to enhance the role of female entrepreneurs in the technology field (on a policy level, culturally or otherwise)?

From a policy level, create an ecosystem of enablers focused on supporting female entrepreneurs and create schemes to make it easier for them (e.g. tax breaks, skills-building programmes, business support/coaching for the early stage) on the entrepreneurship journey. Create a network of women entrepreneur role models who share their authentic experiences so that younger generations see that it is not easy but can be done (e.g. "How did you do it": Themed events, where concrete examples of successes and overcoming challenges are shared). Create investment vehicles (from the early stage and Angel Investors to VC) which fully focus on investing in women. This means that businesses run by women will no longer be assessed through the eyes of males, which in turn means they will be assessed fairly. Create ecosystems to allow women to stay in the pipeline, to grow and scale, and not just be content with early-stage businesses.

Anything else you'd like to share about female technology entrepreneurship?

Statistics are very clear on the shared benefits and dividends created by investing in women entrepreneurs. Thus, it is in everyone's interests to unlock the potential of women tech entrepreneurs because their contribution has a big impact on creating inclusive economic growth for any country and continent.





ORGANISATION: Fraser
Consulting

www.fraserconsulting.co.za



What do you think are the most common challenges women face as entrepreneurs in the technology field?

The current models around funding and entrepreneurship support have been largely adapted from western models which cater specifically for startups founded by men with means. While offering start-up support, these programmes don't necessarily cater to entrepreneurs from more diverse backgrounds, with different social and financial responsibilities and pressures. What is more, many female entrepreneurs that I have met don't necessarily identify with being a "tech entrepreneur" but rather see themselves as a social entrepreneur running a tech-enabled business, where the technology enables them to reach more customers, provide a better or cheaper service and leverage partnerships. Many programmes or support marketed to tech entrepreneurs, may not appeal to female founders, as some of them are more driven by purpose and inclusivity than by revenues and growth.

Are challenges that women face in technology entrepreneurship different from the challenges that men encounter? If so, why do you think that is?

Yes, I do think that female entrepreneurs have to face different challenges, especially when you consider that most programme managers, mentors, professionals and investors are male. There are too few women involved in entrepreneurial support, and very few of them make decisions about which businesses should be selected to receive capital. If you have a lack of gender diversity in the support and funding structures, you will find an unconscious bias towards malefounded businesses, which needs to be addressed. This makes it harder for female-founded and co-founded businesses to receive the support they need to make the business a success.

What would it take to enhance the role of female entrepreneurs in the technology field (on a policy level, culturally or otherwise)?

Look at alternative models for supporting female-founded businesses, train more women to become venture capital and fund managers, increase the number of female mentors and professional service providers, showcase more successful female entrepreneurs and provide dedicated funding and support (from government agencies) that are specifically aimed at female-founded businesses.

Tell us more about how Dazzle Angels specifically supports female entrepreneurs.

Dazzle Angels is the first femalefounded and focused angel fund in South Africa. Dazzle Angels' goal is to address gender inequality in earlystage investment management and deployment by creating early-stage angel funds managed by women and invested in businesses owned or cofounded by women. Dazzle invests into technology-enabled businesses which have the potential to expand in South Africa and has partnered with the Technology Innovation Agency to provide grant funding on the basis that matches qualifying startups.

Additional support for female entrepreneurs in South Africa is provided by the following support organisations and programmes:

Future Females, the African Woman's Innovation and Entrepreneurship Forum, Lionesses of Africa, GeekGirl Dinners Cape Town, Women in Tech ZA, 88 Business Collective and CITI's Women in Business Programme.



have to face different challenges, especially when you consider that most programme managers, mentors, professionals and investors are male.



TITLE: Programme Development Manager – Entrepreneurship Support, Manager of FemBioBiz 2019

ORGANISATION: Hivos Southern Africa

www.hivos.org



What do you think are the most common challenges women face as entrepreneurs in the technology field?

Female entrepreneurs face many common and blatant challenges, from lack of access to funding to discrimination in work life. As a white European male in the African female empowerment space, I want to use this opportunity to 'not speak' but let the strong women in this publication explain what the challenges are. I do not do this because I don't feel qualified to talk about the matter, but because rather than repeat what they say, I listen and focus on what we can do about the problems.

What would it take to enhance the role of female entrepreneurs in the technology field (on a policy level, culturally or otherwise)?

A lot can and should be done by various actors to enhance and change things. Benefits coming from the adaptation of technology – be it job creation, improved education or better security – rely on having meaningful access. This access is facilitated by several factors including affordability, relevant support and skills. Everyone has a role to play in improving meaningful

access – the women, the men, the public sector, the private sector, institutes of education and the society as a whole. As long as working women in Africa (and elsewhere) continue to carry a disproportionate burden in comparison to men because they are (often) responsible for both income generation and being the family's primary caregiver, the current state will remain unchanged. We still have a long way to go.

What role can men play in giving more support to women in technology, if any?

In a patriarchal society, various social and cultural norms keep women from reaching their full potential. It's time to stop talking and start doing. Together. With all my being, I believe that the best way to support women - or people in general - is to treat them as equal in all their diversity and differences, like any other colleague, employee or boss. Just listen, acknowledge, assist and collaborate. That doesn't mean that quotas and additional support don't work. In many countries, it's the private sector that dictates matters, and in many others, it's the government that



No matter how you turn it: women hold a disproportionately small share of the jobs in technology (under 20%), and female founders hardly receive any funding.

make sense. Besides, gender-diverse teams are known to make better business decisions, create more opportunities, are more efficient and are less vulnerable.

sets the course. Let's combine all parts to create an equal playing field and take it from there. If this is what we want, then let's make it happen. Women and men alike have the responsibility to support and encourage women in tech. Let's follow the brave girls, women, boys, men, or whatever gender one associates oneself with and let's all do a little better.

How do you see the future for female entrepreneurs in technology?

For those working in the 'people's space' of supporting women in technology, you'll have to be a true optimist not to be at least a little sceptic. There are two groups among those who are engaged in supporting female entrepreneurship in technology: those who complain about there not being any women in tech, and those who seek to prove that there are. Regardless of which group you belong to, the numbers don't lie - there are simply too few women in the space. The conclusion to take action is a matter, of course. While there is a growing number of female coders, for instance, how many are in decision-making? From the perspective of human rights, global justice and equality, the conclusion is simple: something needs to change. Full stop. As the importance of ICT and computer science fields will continue to grow, we will need more and diverse

talent. The future should not be a Boys' Club. We aim to do our part by continuing the solid work of FemBioBiz, an initiative started by the government of Finland. Accelerating female-driven startups in biosciences in 12 countries in southern Africa holds the potential to change the game even just a little.

Anything else you'd like to share about female technology entrepreneurship?

Tech is now, and tech is the future. No matter how you turn it: women hold a disproportionately small share of the jobs in technology (under 20%), and female founders hardly receive any funding. If basic human rights issues are not your cup of tea (but they should be), then perhaps basic economics will convince you. As Shark Tank's Kevin O'Leary says about female founders: "They make me more money." Although many women can do just as well or even out-do men, they are still being left behind. It just doesn't

6. RUNNING TECH STARTUPS IN THE SADC

The challenges that women experience as entrepreneurs in southern Africa are multifaceted. However, the female experience in technology entrepreneurship is part of a global phenomenon. and not all of the challenges pointed out by our respondents are unique to the African context. Leadership positions, for example, are still rarely held by women, especially in technology.

This being said, traditional gender roles prevail in the sampled

southern African countries and affect women's lives strongly, both in their home and at the workplace. Understanding the underlying cultural challenges faced by women provides a starting point to the much-needed change in the mind-set to see women as active contributors to society outside the

Some of the challenges discussed in this chapter are general issues any entrepreneur can relate to, regardless of gender. These include the lack of funding opportunities for early-stage entrepreneurs or the need to import most of the necessary equipment when there are no local suppliers available. The struggle to be taken seriously despite being young or one's ethnicity can certainly be very real for members of both genders, not only women. The fact that the struggle is universal can, therefore, legitimise the significance of these challenges. Thus, applying a female lens to the whole ecosystem of entrepreneurship can expose pertinent challenges and, when resolved, improve the business environment for everyone.

6.1 LACKING THE BASICS

The interviews and focus group discussions provided insight into the fundamental issues which



The struggle to be taken seriously despite being young or one's ethnicity can certainly be very real for members of both genders, not only women.

aspiring entrepreneurs in southern Africa have to deal with in many cases. Matters such as the high cost of or the unreliability of internet connections, or the lack of skilled talent are a reality for the majority of entrepreneurs, especially in the field of technology. Having skilled people to work with and a decent internet connection are prerequisites to build a technology-based company, and when the basics are not there, it's bound to be a rocky road.

From an entrepreneurship ecosystem point of view, the main challenge for women includes access to seed-funding¹³ to kick-start their business. In discussions with business support organisations, there seems to be some common criticism of the complaint about the availability of financial resources. Some of the business development experts we spoke to share the frustration with many entrepreneurs who tend to become fixated on the need for funding as an excuse for them to take the easy way out, or for not being willing to take the personal risk that entrepreneurship often requires. Often, piloting a minimum viable product or validating it with customers might require less funding than an entrepreneur might initially expect in the early stages of startup development. A lot can be done when the entrepreneur is skilled in design thinking and has the willingness to push despite financial support at the start.

However, there can be structural challenges concerning funding. It is pertinent to analyse the practical obstacles in women's ability to obtain an identity card or bank account, for instance. In some

cases, the presence of a male family member may still be required for that, and it can act as a hindrance to funding for women. In several countries, the entrepreneurs talked about being excluded from formal funding options such as bank loans. Many women described the banks' collateral requirements as a problem exclusively encountered by women because the property is usually the accepted form of collateral. Property has typically been owned by men in the countries reviewed in this study – or by the Caucasian minorities at the time of former apartheid governments in Namibia and South Africa.

Since a majority of the companies featured in this study were young (60% had been in business for two years or less), investment-related matters such as raising venture capital funding, difficulty asserting oneself in investment negotiations or sexism in venture capital circles were not highlighted much in the results. Nevertheless, it is worrying how investment remains elusive to women. Caucasian men dominate the investment space14, and several reports have indicated how investors tend to invest in who and what they know - and that is often male-driven startups, focusing on solving problems experienced by men, designed in a way that is suitable to men.

6.2 BEING A TECHIE AMONG NON-TECHIES

Many of the women participating in this study shared their frustration about having to educate their clients about their product or service offering. Markets are moving fast, but perhaps not all of them are ready for the high-tech solutions which these entrepreneurs are creating. Some of the solutions are considered mainstream in the developed markets, but they remain a novelty in southern Africa and the adoption of technological services in certain geographical areas can remain slow. Some of the entrepreneurs interviewed have moved to more established markets abroad, but most continue to swim against the mainstream and are committed to solving local problems.

Respondents in South Africa, on the other hand, described the markets as 'cut-throat' because competition has increased a lot in the past decade. Instances of intellectual property theft or difficulty of getting a foot into the market were more prevalent in the interviews conducted in South Africa than in the other countries.

6.3 DOES IT MATTER WHO WE ARE?

Which of the challenges encountered by technology entrepreneurs are unique to women? It is not easy to discuss cultural matters in Africa and its multitude of ethnicities, cultures and languages. Risking generalisation, we will outline some of the frequent statements originating from the study.

"Blue is for boys, pink for girls."

The majority of the women who responded from the sample countries said they lived in patriarchal societies with continuing traditional gender roles. These

¹³ By seed-funding we mean money or capital invested into a startup in an early stage where it does not generate its own cash. The source of the funding can be from friends, family, angel investors or for instance crowd funding in exchange for a stake of the company.

¹⁴ Wired UK: "Melinda Gates: The VC industry funnels money to white men" [accessed 10-5-2019]: https://www.wired.co.uk/article/melinda-gates-venture-capital-diversity

are socially constructed from an early age, upheld in institutions of education and follow the women into working life.

A majority of the entrepreneur interviewees shared a feeling of being a misfit as a child due to having interests that were considered unsuitable for girls or choosing a field of study that was generally perceived as masculine. This sentiment came up in all the focus groups in all the countries. Some of the entrepreneurs interviewed were adamant that they are teaching their children gender-neutrality, in contrast to how they were brought up themselves. One example was how chores in the house were divided equally between sons and daughters. "Sometimes she rakes the yard, and he does the dishes, and then they switch"

Schools were seen as crucial in the social construction of the children's gender identity. Teachers play an invaluable role not only as educators but also as those upholding certain gender divides in society. "Woodwork is for boys, and needlework is for girls", one participant remembered teachers saying when she was in primary school in the 1990s.

Regarding education, 60% of the respondents hold a degree equivalent to a Bachelor's or higher. In most of the featured southern African countries, the respondents of this mapping represent the first generation that benefits from rapid growth in universal access to primary education¹⁵. This poses another challenge for those wanting to run their own business as opposed to becoming

an accountant, a lawyer or a doctor. Leaving a traditional place of work or a field of study to pursue entrepreneurship might not be a favourable choice in the eyes of their parents – many of whom tried to pressure their daughters not to forgo the opportunity they never had. Several respondents had heard about how tough entrepreneurship is and had been advised against it because women are "softer" and shouldn't pursue it.

"Shouldn't you be married by now?"

The expectation in communities that women must marry, and bear children was echoed in all the responses from the sample countries. "Why do you need anything more but a Bachelor's degree? Be careful because you might not attract a man if you educate yourself too much. You are still single."

60% of respondents have children. The mothers spoke of mixed feelings of both pride and inadequacy - many talked about wanting to be a role model to their children and show them that women can achieve anything they set their mind on, but they also shared about being judged by peers for working late and supposedly neglecting their spousal or parental responsibilities. Many of these well-educated women still feel that society expects women to make the home and family their main priority. "An older female colleague saw me work late at the office. Once she came over to me and offered to take me to church. She wanted to get guidance for me on how to be a better wife and mother."



Many women described themselves as 'lucky' or 'fortunate' to have a spouse who takes part in child-rearing or helps with chores because in general men in their communities aren't as supportive.

"Being one of the 'boys'"

The need to balance the home with the business was evident, especially among those who are married and/ or have children. Networking was described as one of the practical aspects of business affected by the home and traditional gender roles. In a male-dominated field such as technology, networking events are often held at bars or clubs at hours not suitable for those with childrearing responsibilities. Some spoke of a feeling of discomfort when attending such events because they were then judged for 'trying too hard to be one of the boys', as one respondent put it. Another was concerned about being perceived as 'not a proper woman' for hanging out at bars. For entrepreneurs, this is particularly problematic due to the importance of professional networking.

In all the focus groups, participants discussed 'survival techniques' for

¹⁵ Regional overview: Sub-Saharan Africa: Education for All by 2015, will we make it? EFA Global monitoring report 2008; 2007 https://en.unesco.org/gem-report/sites/gem-report/files/157229E.pdf

how to fit in and be "one of the boys". Some said they started to dress more conservatively to avoid coming across as too feminine. One respondent gave an example from the corporate world where she was told to do so as not to "disturb the men with a feminine presence". Other respondents had taken the opposite approach by making an effort to "wear those high heels and red lipstick so they get used to the fact that women can be in tech and still be women".

they would arrange a meeting. One respondent said that in her view, clients do not take women seriously as service providers for technology solutions, and therefore, she would not book meetings herself but asked a male colleague to do so. The harassment goes beyond the corporate world. The women reported being asked for sexual favours in exchange for projects,

funding decisions and partnerships. "The meeting would be going well up to a certain point until the topic changes, and he goes: 'How about you become my girlfriend?'".

Setting female quotas has been a way for governments and companies to counteract discrimination. Strides have been made in enhancing the gender balance in parliaments and government institutions, especially where female quotas have been implemented.16 While the number of female parliamentarians remains low in southern Africa, it has more than doubled since 1995. Rwanda is topping the charts with over 60% of parliamentarians being female, which is close to 40% more than the average in sub-Saharan countries.¹⁷ A significant share of the women participating in the focus groups had personal experience of being hired to fill a quota, and the mixed feelings they had about it were evident. All of those who had that experience acknowledged that implementing such quotas in business can be helpful to start diversifying the workforce, but few had good things to say about the experience of having been part of a quota. It would soon become evident that they had not been hired because of their skill, but because of their gender so that the workforce looked good to government officials or funders, for instance.

Some entrepreneurs proudly stated that they only hired women as a matter of principle, even if they risked losing a client by doing so. Many respondents thought

"Can a woman do this?"

The interviews and discussions were ripe with examples of undermining women or not looking down on them because of their gender. "Being underestimated or not respected due to being female" was mentioned as one of the main challenges women face. Clients (both men and women) and male colleagues or employees were said to be guilty of undermining.

Age also matters. Some founders stated that they no longer employ people older than themselves. They feel that it is culturally too difficult to manage an older employee without coming across as disrespectful – a potential sign of a hierarchical society, where elders should always be respected.

A lot of the experiences shared about underestimation were made in the corporate world, which a majority of the respondents left to pursue their own business – partly because of the blatant sexism they had encountered. The cases ranged from opportunities afforded to less experienced male colleagues to sexual harassment at the workplace.

As entrepreneurs, the women resorted to having their male colleagues approach clients so that

"Tech in Namibia is mainly in activities related to services. manufacturing and construction. Due to the vastness of our country, women have to travel to work and canvass for customers, leaving the family at home. For many women, especially with young children, that adds a lot of strain. Also, women often find themselves working in environments which do not accommodate their needs: safety issues when travelling or onsite, or unprofessional male behaviour where sexual harassment or inappropriate speech is commonplace." Online survey response

¹⁶ UNESCO Global Education Monitoring Report, 2017 [accessed 6-5-2019] https://gem-report-2017. unesco.org/en/chapter/gender_monitoring_leadership/

¹⁷ UN Women: Facts and figures: Leadership and political participation [accessed 6.5.2019]: http:// www.unwomen.org/en/what-we-do/leadershipand-political-participation/facts-and-figures



According to
the experts who
are involved in
entrepreneurship
support, self-limiting
beliefs stand in
the way of female
entrepreneurs.

that hiring based on merit was important, while others hesitantly admitted to subconsciously hiring men over women and thus perpetuating old norms.

Self-limiting beliefs

It has been six years since Sheryl Sandberg, the COO of Facebook, published her bestselling book Lean In: Women, Work, and the Will to Lead, advocating for women to claim their space in technology and the corporate world. Her book was mentioned by several participants as a source of inspiration, and her lessons seem to remain important. According to the experts who are involved in entrepreneurship support, self-limiting beliefs stand in the way of female entrepreneurs. Having strong confidence in one's skills, the trust that hard work pays off and the mindset to grow are key qualities of a successful entrepreneur. In the focus groups, it was evident that even calling themselves an entrepreneur proved difficult to some women, especially if they hadn't managed their company for long yet. "The term is for old men in grey suits", said one focus group participant.

Many respondents attributed it to an "African culture" in which girls are often raised to be modest, making it particularly difficult for African women to compete in a male-dominated industry. This can result in women having difficulty to perform in startup competitions, where they are asked to pitch their business idea to a panel of judges and convince them that they have a unique solution worth investing in. Too often, women are portraying their companies conservatively when it would be more suitable to be bold. "Men walk into those situations naturally and with authority. I wasn't born with it, so I need to learn to project that," one female founder said.



"Men walk
into situations with
authority. I was
not born with it,
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learn it ..."

7. OPPORTUNITIES

Recently there has been a wave of activities – such as professional networks, mentorship opportunities and specific funding opportunities – directed specifically at women in SADC region.

However, many of the respondents in this study still struggle to find those services and work for a more equitable future of entrepreneurship ecosystems continues. Based on these findings, we outline a few key messages from the entrepreneurs themselves and the best practices of the experts. We recommend that organisations supporting entrepreneurs directly discuss these topics with their beneficiaries. They can also be raised in the appropriate networks to make sure that the various approaches are suitable to the needs of female entrepreneurs in their respective organisations. Female entrepreneurs are similarly encouraged to take an active role in demanding the necessary kind of

1. CELEBRATE LOCAL FEMALE ENTREPRENEURS AS ROLE MODELS

There are not many female entrepreneurs in technology yet, and it affects the way women are viewed in that space. Entrepreneurs can

celebrate their peers and highlight partnerships among femaledriven startups. Listening to locally approachable entrepreneurs allows aspiring entrepreneurs to hear real entrepreneurial stories from people they can relate to. Hearing about the mistakes, the losses and the way they almost failed (or actually did) shows others that no one is perfect. This peer-support is valuable. Consider also the other communities wherein the absence of field-specific role models, women are currently looking for mentors. Interestingly, some participants look to their religious or spiritual leaders for guidance in business, too, as many of them are also entrepreneurs.

2. FLEXIBLE BUSINESS SUPPORT

As seen in the data, 60% of women have childrearing responsibilities. The same percentage of women juggles between a day job and running a business. Furthermore, women are often the ones to shoulder responsibilities in the extended family or other communities, such as the church. Consider providing business support that is sensitive to the various responsibilities women have. Providing childcare facilities during training or business support can increase the attendance rate of working mothers. About half of the women surveyed preferred getting support during business hours while the other half preferred to have it outside of regular business support. Consult your clients and challenge yourself to provide the support that's needed in a suitable way.

3. BALANCE OFFLINE WITH ONLINE

99% of the respondents have a smartphone at their disposal, and 95% use social media almost daily. The top three preferred sources they use for further development as an entrepreneur are:

1. Attending seminars, training events or conferences 2. Networks for entrepreneurs and business owners (online) 3. Networks for entrepreneurs and business owners (offline). Discussing the modes of delivery for the services already on offer with the end-user will allow for a larger uptake of the services and ultimately stronger enterprises in your ecosystem.

4. SUPPORT THE ENTREPRENEUR IN YOUR COMMUNITY

Feeling lonely and judged was mentioned a lot in the data compiled. Plenty of value can be given within communities by offering emotional support, words of encouragement and a shoulder to cry on to the sisters, mothers, cousins, neighbours and other members in our communities who are pursuing their business.

Practical acts of support include advocating entrepreneurial-friendly policies and buying local products. Implementing more flexible work methods in places of business can allow for part-time entrepreneurs to conduct their business and technology allows several modes of that, including the tracking of tasks and responsibilities of remote work done by employees.

8. STARTUPS ON THE RISE

Africa is buzzing with up-and-coming startups. We asked the experts featured in this publication to mention a promising technology-based startup run by a female. Some might represent a country outside the SADC region, but since we believe it's important to look for startups from all over the world to benchmark and be inspired by, we include them, too.

Here they are



3D-IMO www.3d-imo.com

"3D-IMO is an AI-infused product that, at its core, creates 3D virtual, and 3D printed planning models for analysing personal data to predict and help prevent injuries. With its current focus on the sports sector and the amount of money involved with sports these days, I see this application and the people behind it go far."

– Marnix Van Holland



FARMDRIVE www.farmdrive.co.ke

'Sustainable agriculture is the mos effective tool to tackle poverty head-on and closing the funding gap for small-scale farmers is the key to achieving African inclusive economic growth. FarmDrive is an example of a company whose business model is about uplifting people at the bottom of the pyramid and as a consequence, contributing to UN Sustainable Development Goals 1, 2, 5, 8, 10."

– Pauline Koelbl



HUDUMASMART

www.hudumasmart.co.tz

"This is one of the youngest startups that are creating a social impact yet generate high revenues and meet the high demand for access to housekeepers and office cleaners in Tanzania. This platform is run by a first-year university student who has to pursue her studies and yet keep the business running and growing."

- Carolyne Ekyarisiima



LOCUMBASE

www.Locumbase.com

"Zulé founded Locumbase, an online platform that connects freelance medical professionals with practices who need them. She attended our launch event on August 2017 and approached our speaker, Catherine Luckhoff, to become her mentor.

She has since raised funds from several sources including former FNB CEO Michael Jordaan and Private Property Co-Founder Justin Clarke, enabling the platform to become fully functional in 2018."

– Lauren Dallas



LUPIYA

www.lupiya.com

"Evelyn Lupiya is young, determined and has built her fintech business facing a number of setbacks. This did not diminish her determination and drive to succeed. She is also a great example and role model for other young female entrepreneurs. She simply demonstrates that it is possible to deeply care about something and at the same time be great at doing it."

– Nambula Kachumi



TITLE: Owner

ORGANISATION:

Clara Schnack Designs

www.claraschnack.com

This publication has been designed by our trusted designer for the SAIS 2 Programme, Clara Mupopiwa-Schnack, who is the creative mind behind the SAIS 2 brand. After her studies in Visual Communications in Cape Town she worked for two top advertising agencies in Windhoek before she started her design studio nine years ago. The flexible schedule that comes with running your own business allowed Clara to become a graphic design lecturer at a local college. She sees this as her biggest achievement, as she is passionate about skills transfer – particularly to the up-and-coming wave of tech-hungry, highly creative and purpose-driven Namibian youth. The biggest fulfilment is seeing more and more women in her classroom, confirmation of the everincreasing representation of women in the creative industry. Clara believes that by supporting, empowering and believing in each other as women in business, particularly in the tech space, this is one way we can pave the way for the future female entrepreneur, change-maker and innovator.

9. PRODUCERS



The Southern Africa Innovation Support

Programme (SAIS 2) is a regional initiative supported by Finland's Ministry for Foreign Affairs (MFA) in partnership with the government ministries responsible for science, technology and innovation in Botswana, Namibia, South Africa, Tanzania and Zambia, and the Secretariat of the Southern African Development Community (SADC). The Programme supports the growth of new businesses by strengthening innovation ecosystems and promoting cross-border collaboration between innovation role-players in southern Africa. It applies the three tools of innovation funding, capacity building and knowledge exchange.



Hivos Southern Africa (established in 1968) has been in southern Africa with its Hivos Southern Africa office since 1989 and has built a broad network in the region by supporting and seed-funding various incubators, supporting civil society organisations, founding inclusive financial entities and cooperating with government institutions and business associations. The organisation has a longstanding track record of supporting the overall entrepreneurship ecosystem – with a strong emphasis on the inclusion and role of women and youth – creating thousands of sustainable jobs and investing millions.



"... Open societies welcome diversity and offers equal opportunities to all ..."

Hivos vision

10. CONTRIBUTORS









































