Deloitte.



Empowering Women Business Leaders in Africa's Digital Transformation

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Executive Summary

Digital transformation in Africa promises significant social and economic benefits to the region. This article examines opportunities for governments and international donors to support a segment of women poised to catalyze Africa's growing digital economy – African women business leaders.

To effectively maximize women business leaders' potential in Africa, governments and international development organizations must balance their support among these two distinct segments of women business leaders: bridging the gender gap in digital adoption by women-owned micro-, small- and medium-sized businesses (W-MSMEs) and empowering women tech founders to launch and scale innovative digital solutions. Informed by Deloitte's work across the region and an in-depth look at the current state of research on these topics, this article summarizes persistent barriers facing these groups and the interventions designed – and in some cases, proven – to address them.



Summary of Challenges and Recommendations

	Digital Adoption by W-MSMEs	Start Up and Growth for Women Tech Founders		
Barrier	Recommendation	Barrier	Recommendation	
	Subsidize basic connectivity hardware, such as mobile phones, within digital trainings		Support greater female representation in investor networks	
Financing to Access Digital - Tools	Work with financial lenders to better serve women business owners	"Hard Capital" Financing – For Growth	Design and launch innovative financing instruments for women tech founders	
	Establish and grow more women-centric impact investment funds		Help women founders develop tech solutions in high-value, male dominated sectors	
Skills for Digital Adoption	Offer digital trainings tailored to the needs of W-MSMEs	"Soft Capital" Social	Drive accountability by setting goals for female participation	
	Bundle digital skills with business strategy and management topics in W-MSME trainings		Develop coordination mechanisms to help tech founders access startup ecosystem resources	
	Invest in making digital W-MSME trainings accessible and safe for participants	Networks, Mentors & Talent	Increase funding for networking events, conferences, and platforms for women founders	
Digital Connectivity & Exposure	Tie digital adoption to clear business outcomes for W-MSMEs		Prioritize ways to put more women at the table and in decision-making policy positions	
	Engage communities and families of W- MSMEs to increase acceptance of digital tools	Enabling Regulation	Collect gender disaggregated data in startup laws and programs	
	Engage peer groups to promote digital adoption among W-MSMEs		Reduce barriers to accessing government contracts for women-led businesses	

Introduction

African governments, business communities, and donor partners are committed now more than ever to using digital connectivity and emerging technologies to advance or even leapfrog towards development objectives, address market gaps, and facilitate inclusive and sustainable economic growth.

The African Union's visionary 2020-2030 Digital Transformation Strategy for Africa includes plans to create a Digital Single Market, expand universal access to basic connectivity, improve the enabling environment, and digitize the agriculture, health, and education sectors. Since 2018, the World Bank Group's Digital Economy 4 Africa Initiative (DE4A) has invested \$10 billion over 100 projects across the continent. In 2022, the U.S. government announced its support via the Digital Transformation with Africa (DTA) initiative, through which multiple U.S. agencies partner with African and U.S. businesses to support infrastructure and digital economy expansion, workforce investments, and to strengthen the digital enabling environment. In 2023, the U.S. government mobilized \$82 million in funds for new infrastructure, projects, and programming under the DTA initiative.

Yet according to the World Bank, only about 36% of Sub-Saharan Africans have access to broadband internet and, for those who do have access, basic data plans can cost up to three times more on the continent than in regions with more advanced digital infrastructure. The continent also faces a persistent digital gender gap. Within Sub-Saharan Africa, mobile internet use—the primary access point for internet users—has a 37% gender gap, reflecting the over 190 million women not using mobile internet services. This digital gender gap extends to the growing digital economy in Africa, where women-owned or led businesses are often lag in adoption and use of these technologies. ²

Given Africa's digital gender divide, strategic initiatives have objectives to include women and address the root causes of gaps in access, literacy, and usage, notably by investing in STEM education and ICT skills training for women and girls. However, for African governments and international donors to achieve their ambitious digital transformation goals for the region, women need to be engaged not just as passive beneficiaries of programs and policies, but as a set of active and emerging champions catalyzing digital transformation.

Informed by Deloitte's own work, as well as interviews with women business owners, donors, and other stakeholders, this article examines opportunities for governments and international development organizations to support a segment of women uniquely poised to advance Africa's growing digital economy – women business leaders.



While women decision-makers in leadership in large companies have a key role to play, in this paper we focus on women business owners and founders. One important distinction that is often missing from initiatives focused on women in business or digital economy is the difference between women-owned micro-, small- or medium-sized businesses (W-MSMEs) and women tech entrepreneurs or startup founders. Each of these groups—which are diverse in themselves and can and should be further segmented—adopts and uses digital technologies differently.

W-MSMEs aspire to deliver a product or service to customers to earn revenue and may use digital solutions as enablers to do this (e.g., via a website, by using mobile money or social media), but many do not.⁴ On the other hand, women startup founders aspire to bring innovative and disruptive solutions to market and rapidly scale these solutions, with digital technology often at the core of their business model (e.g., fintech, mobile apps, AI, IOT-based ventures).

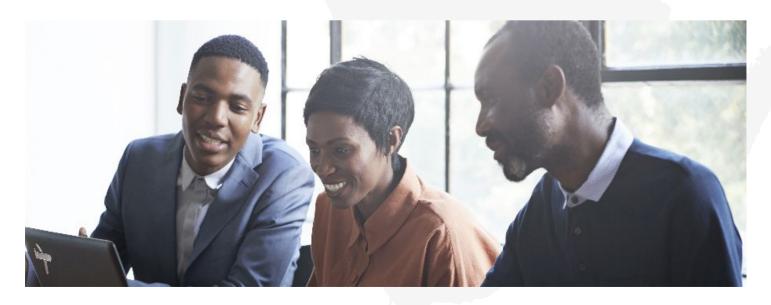
The following sections focus first on W-MSMEs and then women tech entrepreneurs, exploring the sometimes intersecting, but distinct challenges and opportunities related to their roles in Africa's digital transformation.

Deloitte's footprint in Africa spans 48 offices across 53 countries. We have implemented services ranging from business trainings for women entrepreneurs to national economic policy and regulatory reforms. Today, Deloitte is a strategic advisor to major donors like the World Bank, USAID, the UK's Foreign, Commonwealth & Development Office (FCDO), and the Mastercard Foundation, and is a trusted implementing partner for programs including seven USAID-funded projects covering 25+ countries in Sub-Saharan Africa across health, infrastructure, economic growth, and governance. Within the digital domain, Deloitte is working across the continent to expand infrastructure for connectivity as basis for economic growth; support digital inclusion, literacy, and an enabling environment for a digital economy; and to advance government digital services and cybersecurity.

E-Commerce Revenue Growth

\$15 billion

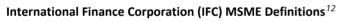
In platform revenue growth could be achieved in Africa by 2030 by closing gender gaps in e-commerce sales³



Women-Led MSMEs

In Africa, like most regions, MSMEs are engines of economic growth. The estimated 44 million MSMEs in Sub-Saharan Africa generate approximately 80% of new jobs in the region,⁶ with nearly all classified as microenterprises.⁷

There is evidence that MSMEs can unlock even greater potential by adopting digital tools and technologies to enable their businesses to integrate into the digital economy. MSMEs can use digital tools to access new markets beyond their immediate geography, introduce efficiencies in business operating processes, and build the transaction history needed to establish creditworthiness and access loans from financial institutions. Digital solutions have added benefits for informal businesses, helping to increase their visibility to governments and donors and to access support. Yet W-MSMEs are less likely to access and incorporate digital elements into their business models. In There are several interconnected reasons for this: lack of connectivity and exposure, limited funds to access digital tools, and a skills gap that inhibits adoption.



Indicator	Employees	Total Assets (US\$)	Annual Sales (US\$)
Micro Enterprise	< 10	<\$100k	<\$100k
Small Enterprise	10–49	\$100k-\$3,000k	\$100k-\$3,000k
Medium Enterprise	50–300	\$3,000k -\$15,000k	\$3,000k –\$15,000k

L'Arbre De Vie Group, a manufacturer of innovative beauty and food products, sought to scale to markets outside of its base in Senegal. Yet the W-MSME's processes were nearly entirely manual, with handwritten invoices, Excel spreadsheets, and a limited social media presence. Through the World Bank's PAREEL program, implemented by Deloitte Senegal, L'Arbre De Vie Group founder Laure Barry gained access to general mentoring, training, and personalized coaching, including on digital adoption. This targeted programming enabled L'Arbre De Vie Group to adopt digital back-office functions (e.g., accounting and HR), deepen its use of social media for digital marketing, and learn about product lifecycle management (PLM) software. "Digitizing accounting and invoicing allowed a level of traceability and generated data for better decision-making," said Barry, who was able to access investment and grow her company from two to eight employees within two years.



Woman-owned micro, small and medium-sized enterprise (W-MSME)

— a business ≥51% owned by a woman OR ≥ 20% owned by woman/women AND (i) has ≥ 1 woman as CEO/COO/ President/Vice President AND (ii) has a board of directors with ≥30% women, where a board exists⁵

Job Creation

44 million

MSMEs in Sub-Sahara Africa generate approximately **80% of new jobs**.

Digital Connectivity & Exposure

Two basic prerequisites for W-MSMEs to adopt digital tools and integrate into the digital economy are: 1) basic access to internet and hardware and 2) awareness of digital solutions and how they can benefit their businesses. Given that women in Africa are 28% less likely than men to own a smartphone, the main access point for internet on the continent, most women business owners are already at a disadvantage. 13 At the micro-enterprise level, where owners largely use their own personal mobile devices to conduct business, this gap is a critical constraint to utilizing digital tools.

Exposure, which has obvious links to connectivity, is also critical. In Nigeria, women micro-entrepreneurs were less aware than men on the uses of mobile phones to improve businesses, particularly for taking out loans and credit, saving or storing money in a mobile account, issuing invoices, and storing information and files. ¹⁴ In line with the Technology Acceptance Model (TAM) of behavior science, W-MSMEs with limited exposure to digital technologies, are less likely to perceive their usefulness and ease of use, lowering their intentions to adopt and actually use technologies. ¹⁵ These barriers are most acute for women in rural areas, but can also exist for women business leaders in cities. 16 Education is also tied to access and exposure. Women who have completed at least secondary school are far more likely to have internet access than those without and there is no gender gap in access to internet for Africans with university-level education. ¹⁷

"In 2024, businesses can't operate without being digital. Technology is an enabler to scale your business."

Evelyne Dioh, Managing Partner, WIC CAPITAL

Women in Africa

Less likely than men to own a smartphone.

Recommendations

- Tie digital adoption to clear business outcomes for W-MSMEs. Digital adoption should not be encouraged for the sake of being digital, but always tied to the opportunity for business growth. A study of W-MSMEs in Nigeria showed that "perceived usefulness" was the key factor in deciding whether to adopt and use ecommerce. 18 W-MSME-focused ICT training programs should deliberately demonstrate the value and ease of use of digital technologies. For example, programs could prioritize showing digital finance impact on increasing and securing net profits—top concerns of W-MSMEs¹⁹ —as an entry point to digital adoption.
- Engage communities and families of W-MSMEs to increase acceptance of digital access. To overcome restrictive social norms that may prevent W-MSMEs from easily accessing digital technology, awareness-raising programs should engage community leaders and families by emphasizing the potential household monetary gains and socially acceptable uses. Profiling African women businessowners²⁰ from similar communities or cultures, who have successfully used digital technologies to generate new revenue while staying near the home, for example, could increase acceptance by male gatekeepers for W-MSME adoption.²¹
- Leverage peer groups to promote digital adoption. Programs designed to promote digital adoption among W-MSMEs should build on existing peer groups, such as women's cooperatives, or create new forums for digitized African W-MSMEs to share their experiences integrating digital tools into their business models. Presenting case studies from trusted channels could reduce concerns that non-digitized W-MSMEs may have about the utility of digital tools. 22 For example, one study in Malawi on digital payments showed that 42% of respondents learned about a digital payment offering through friends.²³



In Ghana, the U.S. Agency for International Development (USAID) has taken a proactive approach to using digital tools to empower women. We spoke with **Pearl Coleman Ackah**, who as Private Sector Team Leader of USAID's Office of Economic Growth focuses on the intersection of gender, agribusiness, and digital at USAID/Ghana. She shared that "digital tools have been very important and effective in USAID's efforts to bridge the gender divide across our programs. Specifically, here in Ghana, cellular phone access and text communication on meteorological changes provide important and essential information to women farmers."

Financing to Access Digital Tools

Integrating digital solutions into business operations requires investment, which many W-MSMEs cannot afford. ²⁴ For example, additional capital may be needed to purchase digital hardware and software, such as a smartphone, marketing subscription or online platform access, and to maintain new operational costs, such as a new or larger mobile data plan or higher transaction fees. ²⁵ ²⁶ A study by the Global System for Mobile Communications Association (GSMA) found that affordability was the most cited challenge to mobile technology ownership in Africa. ²⁷ In low-income countries, the cheapest available smartphone can require up to 70% of a household's monthly income. ²⁸ More expensive digital tools, like computers or digital tablets, are further out of reach. Only 2% of women-owned micro-enterprises and 8% of men-owned micro-enterprises use them for business. ²⁹ In Africa, high internet costs and the introduction of social media taxation laws result in increased operational costs for MSMEs, particularly in the informal sector. ³⁰ Acquiring new or more advanced digital skills and recruiting digitally-skilled personnel are further additional costs associated with digital adoption. ³¹

These costs can significantly disadvantage W-MSMEs, who already face outsized barriers to accessing finance. For example, W-MSMEs are less likely to have the collateral or credit history required to access business loans that could be put toward investments in technology and innovation. The effect of these systemic inequities is a large and persistent financing gap, of which Sub-Saharan Africa has the second highest of any region (17 percent, or \$42 billion)."³² 33

Recommendations

- Subsidize basic connectivity hardware with trainings. While many government and
 donor-funded programs have moved away from distributing hardware, training
 programs that provide woman businessowners with a smartphone or laptop on loan,
 on a rent-to-purchase plan, or for free can help alleviate upfront financial hurdles to
 digital adoption. In Zambia, a World Bank-funded program showed an increased and
 persistent use of mobile money by women who received free mobile phones.³⁴
- Work with financial lenders to better serve women businessowners. While nearly
 half of African countries have policies supporting MSME capacity building, only 14%
 train financial institutions, 35 leaving an opportunity for donors and governments to
 work more closely with lenders to make the case for investment in women and to
 design digital financial products with W-MSMEs in mind. Emerging evidence has



Smartphone Costs

70%

of a household's monthly income in low-income countries.

Financial Institution Training

14%

of African countries have policies that train financial institutions on lending practices to MSMEs. shown that tailormade financial products like asset- and cashflow-based lending can lead directly to greater access to finance for female borrowers.³⁶

Establish and grow more women-centric investment funds. Although more research
is needed in this area, more funds targeting W-MSMEs could create greater access to
not only financial capital, but to the technical expertise needed to select, purchase,
and integrate the right digital solutions into a business model.³⁷

The Women's Investment Club (WIC), founded in Senegal in 2016, mobilizes investments by women exclusively for W-MSMEs, such as L'Arbre de Vie Group, through the WIC Capital investment vehicle launched in 2019. Through the WIC Académie, the group also offers pre-investment technical assistance and post investment support to WIC Capital investees. WIC aims to address significant challenges that women entrepreneurs face in Senegal, where only 3.5% access credit from financial institutions and 99% of womenowned businesses remain small, despite their strong potential. Digital transformation is one area where it plans to provide further support to W-MSMEs, particularly to increase revenue growth.

Skills for Digital Adoption

Having access to digital tools is not enough.³⁸ Digital adoption requires a foundational level of digital literacy and skills along with business and management competencies. It also takes a certain level of risk tolerance, curiosity, and comfort experimenting with something new, and an ability to analyze and incorporate data into business decision-making, all of which can be difficult in a resource-constrained, low-tech operating environment. Even for the minority of women businessowners with exposure, access, and literacy to use technology in their personal lives, adopting more digital tools to enable business optimization or growth can be intimidating and beyond their skillset.

MSMEs, by their nature, have fewer employees than large enterprises, so it is incumbent on owners and their small teams to build and update skills internally to take advantage of new tools and technologies as they evolve. A World Bank study found that only 28% of African households could afford basic digital skills training; for more advanced ICT skills such as use of digital marketing, these trainings become unaffordable for nearly all households. For many African women small entrepreneurs who often carry most of the unpaid domestic and family care responsibilities, running a business is challenging enough without having to take extra time for training. Moreover business-focused trainings are often not intentionally designed to be accessible for women.

Recommendations

• Bundle digital skills with business strategy and management topics in trainings for W-MSMEs: Designing digital capacity building for businesses with a "bundled" versus siloed approach has shown to be more effective, leading to up to 80% increases in revenue, according to studies compiled by MasterCard Center for Inclusive Growth. 40 Trainings should include not only digital skill building content, but should also cover business strategy, marketing, interpersonal skills, and customercentric approaches like design thinking. Cybersecurity and internet safety skills will also become increasingly important as fintech solutions continue to grow and W-MSMEs become the targets of cyberattacks, harassment and privacy leaks.



Inclusive Digital Skills Trainings

80%

In increased revenue was reported by business leaders who received "bundled" skills trainings, targeting multiple facets of business development instead of a single skill.

- Offer accessible digital trainings tailored to the needs of W-MSMEs: All
 programming targeting W-MSMEs should consider accessibility and
 accommodations, including childcare, transportation coverage, meals, and flexible
 hours. A World Bank study in Nigeria showed that trainings for W-MSMEs that
 offered "wraparound services" like childcare and transportation had a higher impact
 on performance than standalone interventions.⁴¹
- Offer digital trainings tailored to the needs of W-MSMEs: Programming specifically for women participants can be more tailored in content, location, and delivery model to align with specific sectors and geographies where W-MSMEs are more present. Focusing on W-MSMEs could allow for further segmentation and customization. For example, trainings can be tailored for W-MSMEs that have not adopted foundational digital tools or for those who have and are eager to acquire skills to integrate new software. A global study on the impact of business trainings for women found that programs with the strongest gender focus had almost 20 percentage points higher impact on profits than the average training, with the impacts most acute in Sub-Saharan Africa. 42

DigiFemmes, in Côte d'Ivoire is supporting W-MSMEs to grow through digital transformation. The \$4 million program is funded by USAID and the Millennium Challenge Corporation (MCC) in partnership with Microsoft and the Government of Cote d'Ivoire. The DigiFemmes program offers multiple training programs in entrepreneurship and digital skills for different segments of W-MSMEs and women entrepreneurs based on size, business maturity, location, and level of digital integration. For programs requiring intensive time commitments, Digifemmes is currently exploring partnership opportunities to further drive inclusion by providing childcare as a way for participants to stay current with the program's requirements. According to Hawa Sy Berete, MCC Country Coordinator for DigiFemmes, this initiative would remove a key structural barrier to inclusion. Participants in the 2-year long DigiFemmes Academy Program get access to a workspace with high-speed internet and a laptop, removing additional barriers for women eligible to participate. So far, DigiFemmes has provided over 3,500 women business leaders with businessfocused data and digital skills. Berete described the success factors of the program as an "ecosystem approach" to create a supportive environment for participants to thrive and shared that a "goal is to crowd in as many partners as possible for sustainability and impact."43

MCC and USAID designed the program to be modular, replicable, and scalable and are exploring replicating select components of the program in Tanzania in alignment with and with support from the Digital Transformation with Africa (DTA) Initiative. DigiFemmes is a promising model that can be adapted in other contexts with resources dedicated to Africa's digital transformation.



Women-Led Startups

While MSME owners have a vital role to play in generating economic activity, startup founders are uniquely characterized by their willingness — or eagerness — to disrupt traditional business models with innovative products and solutions. Unsurprisingly, at the core of many of these nimble, fast-paced businesses is digital technology. Women founders have contributed to a growing wave of innovation and digitization fueled by startups across Africa.

Still, women are less likely to be members of this vibrant, tech startup community. Even though one in four businesses in Africa are started or run by a woman, African women are less likely to launch and scale startup ventures. According to a study by Startup Genome in 2023, "only about 14% of African tech startups have female founders." Another report found that of 711 African tech startups that received funding between 2022 and 2023, only 149 (21%) had a female co-founder and only 83 (11.7%) had a female CEO.

The effect is doubly damaging – Africa's digital transformation is being stunted with fewer solutions being developed locally without the full participation of women innovators *and*, with fewer women involved in the digital economy, digital solutions are less likely to be designed *for* the unique needs of women users across the African continent. Women tech founders can contribute to job creation, innovation, diversification of economic sectors, and increased productivity, all of which drive long-term economic growth.

But to launch and scale a venture, an entrepreneur must have access to capital, talent, and markets. This must be underpinned by an enabling environment that fosters entrepreneurship through financing, mentorship, social networks, and favorable government regulation. Women digital entrepreneurs in Africa face myriad challenges compared to their male counterparts, particularly regarding access to capital, connecting with business mentors, navigating cultural barriers, and overcoming social norms around risk-taking and entrepreneurship. Mirroring global trends, the gender gap in many African countries increases at each stage of the entrepreneurial lifecycle, with the most significant drop in adult women participation occurring at the early phases of a startup. 46



Female Leaders

11%

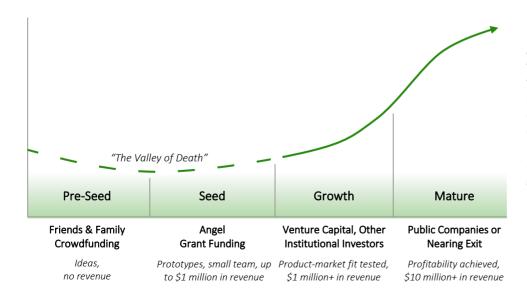
of African tech startups that received funding from 2022-2023 have a female CEO. After a tenured career in consulting, **Ifeoma Uddoh** founded Shecluded, the first fintech company built by women for women in Africa, with a focus on tailored financial products and services for W-SMEs and entrepreneurs. Based in Nigeria, Uddoh was selected to participate in the prestigious Washington DC-based Halcyon Fellowship, where she worked with Deloitte consultants to accelerate the growth trajectory of her venture. RoboCare, an Al-enabled precision agriculture startup based in Tunisia, is co-founded and led by CEO **Dr. Imen Hbiri,** who came to entrepreneurship after a decade of industrial engineering experience. Building on her experience with RoboCare, Dr. Hbiri has created mentorship programs for small businesses trying to digitally transform.

"Hard Capital" - Financing for Growth

Undoubtedly, all startups depend on access to capital. Whether it is to develop a minimally viable product, to test product-market fit, or to grow a team, access to capital is fundamental to survival. It is unsurprising then that Africa's boom in tech startups has been financed by billions of dollars and at a record-setting pace over the past near-decade. Despite a global pandemic, geopolitical instability, and macroeconomic slowdowns over this time, venture capital (VC) deal flow in Africa grew at a Compound Annual Growth Rate (CAGR) of 31% between 2014 and 2022 – from 69 deals in 2014 to 786 in 2020. ⁴⁷ The continent has seen triple digit growth in VC deals by volume and value. In 2022, \$6.5 billion was raised across 853 deals in Africa.

Yet despite this exponential growth, statistics describing investment in African female founders are harrowing. The African Private Capital Association (AVCA) reported that only 7% of deals struck in 2022 were in companies founded by women; 13% went to female-led companies (companies with a female CEO). ⁴⁸ One study by the World Bank and Briter Bridges found that between 2013 and 2021, "for each US\$1 going to all-female founding teams, all-male teams received US\$25." ⁴⁹ While nearly all entrepreneurs face challenges accessing capital at some point, African female founders face outsized barriers throughout the startup lifecycle.

Startup Capital Investment Lifecycle





"Developing vibrant tech ecosystems in Africa puts the continent on the path to digital sovereignty: building the technology and setting the rules that will shape our global future."

Supercharging Africa's Startups: The Continent's Path to Tech Excellence, Tony
Blair Foundation, February 2022

As a startup matures over its lifecycle, founders seek capital investments through alternative sources. The initial stages are the most vulnerable for most entrepreneurs who must survive what is often called the 'valley of death' reflecting the lack of sufficient pre-seed and seed financing available to help them get on their feet.

At the *pre-seed stage*, tech founders are said to rely on 'family, friends, and fools' to turn novel ideas into business models. These informal avenues to accessing financing, however, may disadvantage women entrepreneurs. Women entrepreneurs in Africa are likely to have smaller and less diversified networks "which reduces their potential for creation and development compared to men." ⁵⁰ Entrepreneurs also often rely on their personal financing to support a venture. Yet personal savings are limited in Africa, and women are significantly less likely to own high-value assets, reducing their ability to self-finance entry into the digital economy. ⁵¹ A recent study on land ownership—often an entrepreneur's largest private asset—showed that 30% of women own land in Sub-Saharan Africa, compared to 70% of men. ⁵²

At the *seed stage*, angel investors are a crucial source of outside capital. These risk-tolerant investors place bets on promising ventures with equity investments and often provide coaching or mentorship and access to their own networks. VC firms similarly inject capital investment into high-potential startups beginning at the seed stage. While the number of global and local investors in Africa has grown in lockstep with the number of African startups – reaching more than 1,000 unique investors in 2022 – the profile of these investors puts female African tech founders at a disadvantage. ⁵³ Of the top 100 VC firms globally, 92% of partners are men. ⁵⁴ Investor bias – explicit or unconscious – has the potential to stymie investment in underrepresented founders, including women.

Unsurprisingly, 69% of African female tech founders in one survey felt "disadvantaged or negatively impacted by being a woman when speaking to a potential investor." Importantly, however, the financing gap is not as wide at all stages of investment. One report found that "investments into women-led startups are growing most dramatically at the seed and early-stage levels, fueled by emerging gender-focused accelerators, angel networks and early-stage managers." Funds like FirstCheck Africa, Alitheia Capital, Five35 Ventures, and Aruwa Capital Management each have a dedicated focus on channeling investment to female founders, including those in tech. Women leaders and high net worth individuals have also taken steps toward mobilizing greater investment in women entrepreneurs as angel investors.

A Nigerian group of women angel investors, Rising Tide Africa, combines investment in early stage women-owned or women-led enterprises with business literacy training and a network of women investors. Focused primarily on investments in digital and technology-enabled companies, they focus on strengthening business acumen and enhancing corporate governance.

Recommendations

Support greater female representation in investor networks. Evidence shows that women are more likely to invest in women. A global study by Kauffman found that "women VCs back female tech founders 63% more often than male VCs do." ⁵⁷ Yet while there is a focus by donors and governments on ways to develop a pipeline of women-led tech startups, less attention has been paid to developing the pipeline of women investors. Donors and governments can work with pioneering firms like FirstCheck Africa to grow the network of female-focused tech VC funds designed by and for African women building the digital economy. Initiatives like She Wins Africa and 2X Ignite offer programming intended "to build the market for gender-smart fund managers."

Investment Potential

69% founders felt disadvantaged

of African female tech founders felt disadvantaged by being a woman when speaking with potential investors.

Women Investing in Women

63%

greater likelihood of women VCs backing female founders compared with male VCs.



The IFC launched "She Wins Africa" in 2023, to assist women digital entrepreneurs across sub-Saharan Africa with networking, mentorship, and training. But rather than simply focus on building the viability of women-led enterprises, this newly established program also focuses on the investors themselves. The program provides capacity building for accelerators, entrepreneurial support organizations (ESOs) and VCs with gender lens investing and facilitates matchmaking and pitching events.

- Design and launch innovative financing instruments for women tech founders. While the continent has seen a proliferation of funds that apply a gender lens, there is an opportunity for donors, governments, and corporates alike to structure and scale innovative financial products or programs to catalyze additional capital toward women. Evidence shows that companies that access external capital grow 30% faster than those that do not.⁵⁸ Guarantees for women tech founders or matching funds by corporates or governments would create clear pathways to financing for these entrepreneurs. Startup Tunisia, one example of a government-led initiative, offers 30,000 TND (\$10k USD) to early-stage entrepreneurs and awards bonus points to women-led startup applicants.⁵⁹
- Offer sector-specific programming to support women founders in male-dominated fields and promote investment in more female-dominated fields. Today, there is a mismatch between the sectors that receive the greatest amount of investment (financial services, ICT, energy) and the sectors where women tech founders are concentrated (health, education). Donors and governments can offer sector-specific programming to encourage the next wave of women tech founders into new sectors. Importantly, some evidence suggests that access to information and mentors have a vital role to play here; one study in Uganda found that "women who reported having a male role model in their youth were 20-28% more likely to [cross over into a maledominated sector]." In the same study, 75% of women working in female-dominated sectors incorrectly believed they made the same or more than those in maledominated sectors. On the other side, donors and governments can also help with de-risking, supporting investment readiness, and matchmaking for women-led startups in those sectors with lower levels of investment.



Investing in Women

75%

of women working in female-dominated sectors incorrectly believe they made the same or more than those in male-dominated sectors.

"Soft Capital" – Social Network, Mentorship, & Digital Talent

Women entrepreneurs are more likely to need the backing of male investors to scale their businesses, facing an uphill battle to break into "old boys' networks" that continue to dominate the VC and tech industries. Women also face gender discrimination and stereotypes, such as lower levels of trust and negative perceptions of their professional credibility. To break through these barriers, women entrepreneurs must have strong support from social networks, mentorship, and collaboration with peers. These social networks are especially important for tech startups that must also keep up with the fast pace of tech development and the ever-changing regulatory environment.

Ifeoma Uddoh (Shecluded), spoke candidly about the value of social networks and mentorship early in her career. She shared that "just knowing the real struggles of businesspeople who looked like superstars helped me to understand that as long as the change matters to you, you have to keep pushing forward irrespective of the disappointments, imposter syndrome and other hurdles in the entrepreneurship journey." Her advice to young women entrepreneurs: "Seek access to networks, mentors, and opportunities outside of your immediate network and location. The learnings can transform both you and your business. It did for me personally." 61

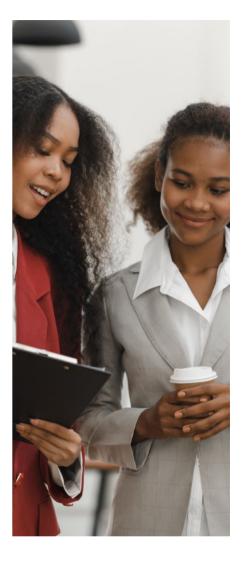
For over 5 years, Deloitte has partnered with the **Grindstone Accelerator** in South Africa, focused on advising high-growth startups and connecting entrepreneurs to valuable networks to advance their development. In 2022, the accelerator launched GrindstoneX, an all-female program, aimed at making women-led startups more investable, scalable, and exit-ready. Over three years, GrindstoneX intends to develop the top 30 women-founded start-ups in South Africa by providing strategy reviews, goto-market planning, business coaching, and funding.

According to **Dr. Imen Hbiri** (Robocare), "cultural norms can affect women's ability to network effectively." ⁶² Today there is still a lack of networking opportunities specifically designed for women entrepreneurs and inclusive spaces where they can connect with industry professionals and gain access to valuable contacts, partners, and mentors. Among the most challenging hurdles for women entrepreneurs to overcome are patriarchal social norms, which programs often do not consider. Like training programs for W-MSMEs, accelerators and other programs aimed at boosting women entrepreneurs are less effective when they do not provide childcare, transportation, and food. ⁶³

Dr. Hbiri also emphasized that "providing networking opportunities in the technology and digital domain is also crucial for women entrepreneurs." Networking events like TLcom Capital's Africa Tech Female Founder Summit, conferences, and platforms allow women founders to connect with other industry professionals, share experiences, establish partnerships, and find mentors. This enhances their professional network and exposes them to new opportunities for collaboration, funding, and growth.

TLcom Capital, an Africa-focused venture capital firm, hosted its fifth annual **Africa Tech Female Founder Summit** in Lagos, Nigeria in November 2023. Over 50 female founders from across Africa spoke on-stage about their experiences launching and scaling tech ventures as African women, as well as the imperative to invest in future female founders.

The hundreds of business incubators and accelerators on the African continent that bridge gaps in both financial investment and ecosystem support often mirror the broader VC landscape, with a persistent gender gap among participants. Fifty-two percent of funded African tech startups from 2022 took part in some form of accelerator or incubation program either prior to raising, or as part of their raise. ⁶⁴ But a global 2020 study by Pitchfork found that accelerators may be deepening the finance gap, helping women-led enterprises raise debt, but not equity. Researchers show that, after participating in an accelerator, male-led businesses increased their amount of equity by 2.6 times as much as female-led counterparts. ⁶⁵



Female Founders

2.6x

Greater equity increases in male-led business compared to their female-led counterparts To empower early-stage, women-led African startups and SMEs, AfriLabs recently launched the **RevUp** Women's Initiative. So far, the program has provided capacity-building training, mentorship, and networking opportunities for 500 women-led enterprises in 5 countries and facilitated the financing of 10 women-led enterprises.

In addition to the networking barriers, African women entrepreneurs, like their male counterparts, are facing a severe shortage of digitally skilled talent to grow and scale their ventures. The reality of "brain drain," the phenomenon where educated and skilled professionals leave the continent for countries in Europe or North America, is often cited by entrepreneurs as a top challenge. ⁶⁶ It is already challenging to network, build a capable team, and keep up with the fast pace of technology, let alone invest in team members only to have them leave for other shores after a year or two.

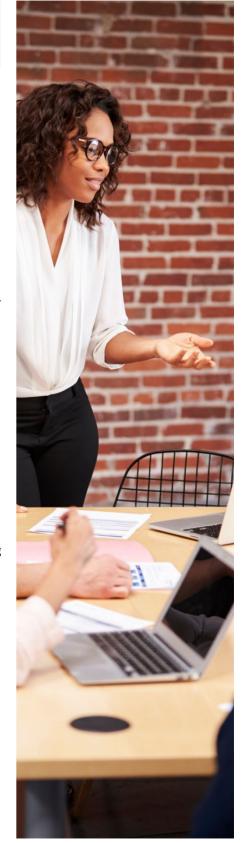
Recommendations

- Drive accountability by setting goals for female participation. Even if a program is
 not solely focused on women, setting a goal or quota for women's participation, and
 incorporating accessibility features and accommodations to remove barriers to
 access can go a long way. For example, a global study of mandatory gender quotas or
 voluntary targets for company board composition achieved greater gender diversity
 than those without diversity goals.⁶⁷
- Help tech founders navigate a wealth of resources with better coordination and more holistic programming. The landscape of programs and resources aimed at digital female entrepreneurs in Africa is rich but fragmented – forcing founders to wade through a sea of information to piece together the resources and technical input they desire for their business. Governments should consider building out digital platforms such as the Innovate Rwanda Platform,⁶⁸ which measures program success in part by its ability to connect women tech startups with a myriad of country-level funding sources.
- Increase funding for networking events, conferences, and platforms for women entrepreneurs. According to Eva Sow Ebion, Strategic Partnerships Manager at Meta and former Director of i4Policy, women entrepreneurs in Africa need "more coaching and mentorship to boost confidence and shift to a growth mentality that acknowledges one's own assets and value proposition." These events and platforms can serve as powerful ways for founders to build networks with peers, find mentors, and build confidence at any stage in their startup journey. For entrepreneurs with less pre-entry knowledge and experience, mentorship has proven valuable for increasing businesses revenue, profit, and professional growth.⁶⁹

Regulatory Environment

An ecosystem's underlying regulatory conditions are also a driving force in an entrepreneur's ability to scale. At the policy level, there is growing recognition of the role of governments to improve nationwide business enabling conditions, so that entrepreneurs can accelerate innovation, employment, productivity, and growth.

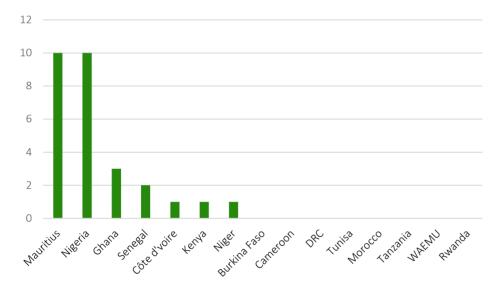
Governance structures within the digital entrepreneurship ecosystem require coordination across government – from education ministries that develop the future



workforce to finance ministries that regulate procedures affecting startups.⁷⁰ Yet decision-makers at the policy level in Africa are typically men and ministries focused on gender equality and women empowerment are minimally involved in policymaking for inclusive growth in the digital economy.⁷¹ ⁷² Without a true "seat at the table" at the ministerial level, women do not have a strong advocate providing data and perspectives to inform policies for digital entrepreneurship.

Countries across the African continent, starting with Tunisia and Senegal, have adopted Start Up Laws to facilitate entrepreneurial ecosystems. These legislative frameworks are a comprehensive policy push to create regulatory reforms and incentives for new enterprises. While relatively new to African countries, policy evaluations of other Start Up Acts show that they can have a sizable positive effect on inputs and outputs of beneficiary firms, including increased revenues, assets, and value. African nations with Start Up Acts, only 36% specifically identify the challenges facing women-led businesses or women entrepreneurs. Deloitte's own analysis found that many of these Start Up Acts fail to mention the word "women" at all.

Frequency of "Women" Mentioned in African Startup Acts



This lack of acknowledgment in key economic legislation represents both a symbolic and often tangible gap in public policy towards inclusive entrepreneurship. Furthermore, these Start Up Acts often lack monitoring and evaluation components, which could impede data collection and accurate assessments of their impact on the startup ecosystem, including on women-led startups and W-MSMEs.⁷⁶

"Women's participation in the digital economy necessitates a rethinking of how gender is integrated into policy," says **Jane Munga**, Africa Program Fellow at the Carnegie Endowment for International Peace and former advisor to the Ministry of ICT in Kenya. "Commitments must be embedded in the regulatory ecosystem to ensure that inclusivity is more than just a policy statement, but a well-resourced obligation with measurable goals and results."

Of the countries that mention women, Nigeria's 2015 National Policy on MSMEs is unique with its in-depth emphasis on women-owned enterprises and the need for inclusive economic growth, including the promotion of new associations of women © Deloitte, 2024

Start Up Acts

only 12

African nations explicitly identify the challenges facing women-led businesses or women entrepreneurs.



entrepreneurs by trade clusters.⁷⁷ It also explicitly calls out sub-ministries of the Federal Ministry of Women Affairs and Youth Development, such as the National Centre for Women Development, as institutional stakeholders in MSMEs.⁷⁸

Other Start Up legislation, such as that proposed in Ghana, limits its gender focus to public procurement and contracting – topics important to businesses looking to serve the government as a client, but narrow in scope. The Ghana Start Up bill mandates a 15% allocation of its public procurement contracts for women-owned businesses. Companies that sub-contract public procurement receive "special preference and other related incentives" for including women-owned businesses based in Ghana. The Governing Board for a new Agency will also "include at least three women among its members." 80

Recommendations

- Increase representation of women in decision-making positions within public institutions that support startups. Government leaders should prioritize initiatives to increase the representation of women in public institutions supporting startups and private sector growth in general (i.e., investment boards and promotion agencies, public accelerators, or funds, etc.). Options include embedding gender specialists within agencies and creating formal ties between Ministries of Women and Ministries focused on digital entrepreneurship. Setting targets for women members on government entrepreneurship boards is yet another way to strengthen representation. A global study found that women's political empowerment (defined as descriptive representation, civil liberties protection, and civil society participation) advances technological change and thereby economic growth.⁸¹
- Collect gender disaggregated data to inform startup laws and enforcement. This research has highlighted gaps in timely, consistent disaggregated data on women entrepreneurs. Strengthening startup policies with monitoring and evaluation components and building capacity among governments and their partners to collect disaggregated demographic data on the sector will enable policymakers to better understand the impact of their policies and programs on bridging the gender divide. In Senegal, for example, the Ministry of Economy Finance and Planning was able to use sex-disaggregated data to allocate public funds to support women's entrepreneurship and increase women's access to credit. 82
- Reduce barriers to accessing government contracts for women-led businesses. Gender Responsive Budgeting and public procurement reform can help improve the allocation of public funds to female-owned businesses. Baseline quotas or incentives for women-owned or -led businesses, such as the 30% quota for public procurement in Kenya, can be an effective way to channel government contracts toward these underrepresented groups. Importantly, these policies should be implemented alongside efforts to help women founders navigate complex public procurement laws. Training to intermediaries (incubators, accelerators, business associations) and supporting more engagement by the government with women entrepreneurs via industry days, workshops, or even user-friendly how-to guides can enable these ventures to work with the government as a client.

Ghana Start Up Bill

15%

of contracts for public procurement must be allocated to womenowned businesses.

"We need more nuanced data on women's participation in the digital economy... bringing more women to the table will necessitate data that can provide policymakers with practical insights"

Jane Munga, former advisor to the Ministry



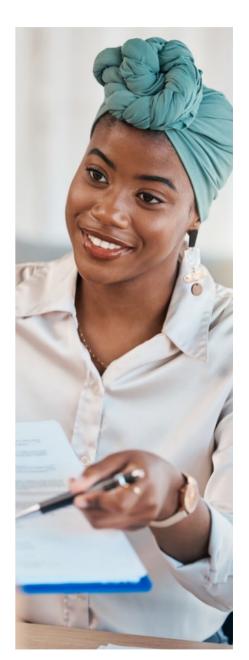
Conclusion

While there is much activity, progress, and many large commitments at the intersection of gender equity, entrepreneurship, and digital, current programs have opportunities to further integrate W-MSMEs and women entrepreneurs into Africa's digital transformation.

More detailed segmentation and research are needed to better understand the technology adoption challenges of W-MSMEs and the barriers to growth for women tech entrepreneurs on the African continent. More data-enabled, gender-intentional programs and initiatives are needed across the continent to unlock the digital potential of women in business. As deep tech, including AI, continues to develop at exponential rates, there is an even greater urgency to close the gender gap both in terms of users (feeding into data) and developers (concerns about representation).

Governments, financial institutions, business service providers, corporations, and donors all have roles to play in seizing these opportunities. With competing priorities and limited funds, decisionmakers may default to the classic chicken and egg paradigm, imposing the need to choose between addressing the upstream causes of the digital divide (girls' education and other factors) or supporting current and emerging women business leaders struggling to adopt and scale digital solutions. The truth is that both are crucial. Yes, young girls need more early exposure, motivation, and skills to set them up for digital careers. And yes, by supporting W-MSMEs and women entrepreneurs now, the path is being cleared for even greater female participation in Africa's digital transformation moving forward.

According to recent UN projections, in 2050 more than 25% of the global population will be African, meaning, if trends continue, approximately 12.5% of humanity will be African women. 85 African women are not passive beneficiaries of the continent's transformation, but are potential catalysts for global transformation. It's time they received more attention.



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- ¹ Kwakwa, Victoria. "Accelerating Gender Equality: Let's Make Digital Technology Work for All." World Bank. March 7, 2023. Link
- ² Orkoh, Emmanuel and Viviers, Wilma. "Gender composition of ownership and management of firms and the gender digital divide in Africa". South African Journal of Business Management. July 27, 2021. Link
- ³ "Women and E-commerce in Africa". IFC. 2021. Page 3. Link
- ⁴ Orser, Barbara J. and Riding, Allan. "The influence of gender on the adoption of technology among SMEs". International Journal of Entrepreneurship and Small Business, Vol. X, No. Y. 2018. Page 12-13. Link
- ⁵ Ibid. IFC's Definition of Targeted Sectors.
- ⁶ "MSME Finance Gap". IFC. 2017. Link
- ⁷ Endris & Kassegn. "The role of micro, small and medium enterprises (MSMEs) to the sustainable development of sub-Saharan Africa and its challenges: a systematic review of evidence from Ethiopia". Journal of Innovation and Entrepreneurship. 2022. Link
- 8 "Alliance For eTrade Development Accelerating Msme Ecommerce In Africa: Roadmap". Alliance for eTrade Development. June 30, 2021. Page 8. Link
- ⁹ Gustale, Eduardo and Alberto Cottica. "How is the Digital Transformation Affecting Informal Businesses in the Global South? Early Findings from a Rapid Survey in 16 Countries". UNDP. May 24, 2023. Link
- ¹⁰ "Digital Technologies Are a Useful Yet Underutilized Tool for African Microenterprises", IFC, 2023, Link
- 11 "Alliance For eTrade Development Accelerating MSME Ecommerce In Africa: Roadmap". USAID Alliance for eTrade Development. 2021. Page 17. Link
- 12 "IFC's Definitions of Targeted Sectors". IFC. 2023. Link
- ¹³ "The Mobile Gender Gap Report". GSMA. May 2023. Link
- ¹⁴ "Understanding women micro-entrepreneurs' use of mobile for business: Evidence from 10 low- and middle- income countries: Supplementary Data". GSMA. 2022. Link
- ¹⁵ Davis, F.D. "A Technology Acceptance Model for Empirically Testing New End-User Information Systems: Theory and Results". Sloan School of Management, Massachusetts Institute of Technology. 1987. Link
- ¹⁶ Interview with Laure Barry, L'Arbre de Vie Groupe. January 12, 2024.
- ¹⁷ "Africa: Digital Divide Provides Lens Into Women's Progress". Gallup. March 8, 2023. Link
- 18 Erumi-Esin, Ritse and Heeks, Richard. "e-business adoption and use among African women-owned SMEs: an analytical study in Nigeria". ICTD '15: Proceedings of

the Seventh International Conference on Information and Communication Technologies and Development. Article No.: 11. May 2015. Link

- ¹⁹ "The Impact Of Digital Transformation On Underserved Microbusinesses". Accion. November 2022. Page 19. Link
- ²⁰ Hammond, Alicia et. al. "What Works in Closing Gender Gaps in STEM?". World Bank. 2020. Page 33. Link
- ²¹ "Understanding women micro-entrepreneurs' use of mobile for business: Evidence from 10 low- and middle- income countries". GSMA. 2022. Page 68. Link
- ²² Ibid Accion. Page 35. Link
- ²³ Tsilizani, Edith Nyauhango. "Assessing The Impact Of Mobile Money In Malawi A Case Of Airtel Money". University of Bolton. Page 40-41. Link
- ²⁴ "Bridging The Digital Gender Divide Include, Upskill, Innovate". OECD. 2018. Page 22. Link
- ²⁵ Maybray, Bailey. "Startup Costs for Entrepreneurs". Hubspot. September 30, 2023. Link
- ²⁶ "Making Digital Connectivity Work for MSMEs". Broadband Commission for Sustainable Development. September 2023. Link
- ²⁷ "The Mobile Gender Gap Report 2022". GSMA. 2022. Link
- ²⁸ "How expensive is a smartphone in different countries?". A4AI. October 7, 2021. Link
- ²⁹ "Accelerating the Use of Digital Technologies is Key to Creating Productive Jobs and Boosting Economic Growth in Africa". World Bank. March 13, 2023. Link
- 30 Achieng, Mourine S. and Malatji, Masike. "Digital transformation of small and medium enterprises in sub- Saharan Africa: A scoping review". 2022. Link
- ³¹ Torres, Jesica et al. "The Impact of the COVID-19 Pandemic on Women-Led Businesses". World Bank. Page 27-28. Link
- 32 "The Mobile Gender Report". GSMA. 2022. Link
- ³³ Highet, Catherine et al. "MSME Finance Gap Report". International Finance Corporation. 2017. Link
- ³⁴ "Can Free Phones Close the Digital Gender Divide?". CGAP.org. February 20, 2021. Link
- 35 Policy Catalogue on MSMEs Financing in Africa. African Financial Inclusion Policy Initiative. March 31, 2021. Page 20. Link
- ³⁶ Siegrist, Felicia. "Supporting Women Entrepreneurs in Developing Countries: What Works?" Women Entrepreneurs Finance Initiative. July 2022. Link ³⁷ Ibid, WeFi.
- ³⁸ "Understanding women micro-entrepreneurs' use of mobile for business". GSMA. 2022. Link
- 39 "Demand for Digital Skills in Sub-Saharan Africa". IFC and World Bank Group. Digital Development Partnership. 2021. Page 32. Link
- ⁴⁰ "Empowering women entrepreneurs: Navigating challenges and seizing opportunities for gender intentional programs". Strive Community. Nov 17, 2023. Link
- ⁴¹ "An Operational Guide To Women's Entrepreneurship Programs In The World Bank". World Bank. July 2018. Page 34. Link
- ⁴² Chinen, Marjorie et al. "Vocational and business training to improve women's labour market outcomes in low-and middle-income countries: A systematic review". International Initiative for Impact Evaluation. June 2018. Page v and 66. Link
- ⁴³ Interview with Hawa Sy Berete, MCC Cote d'Ivoire, June 6, 2023
- ⁴⁴ Stefanuto, Lucia. "Only 15% of Tech Startup Founders Are Female". Startup Genome. March 27, 2023. Link
- ⁴⁵ Jackson, Tom. "The Diversity Dividend: Exploring Gender Equality in the African Tech Ecosystem". Disrupt Africa. June 24, 2023. Link
- ⁴⁶ "New GEM Women's Entrepreneurship Report Underscores Breaking Stereotypes And Seizing Opportunities". GEM. 2022. Page 100. Link
- ⁴⁷ "2022 AVCA Venture Capital in Africa Report". AVCA. April 2023. Link
- ⁴⁸ Ibid, AVCA 2023.
- ⁴⁹ The Diversity Dividend: Exploring Gender Equality in the African Tech Ecosystem, Briter Bridges, 2023. Link
- ⁵⁰ "Entrepreneurship: A Real Challenge for Women in Sub-Saharan Africa". Orange. February 16, 2023. Link
- ⁵¹ Kimaru, Elenah. "Increasing Women's Access to Finance in Africa is Good for Business". Empower Africa. 2022. Link
- 52 Wamboye, Evelyn. "Land Rights, Gender Equality, and Economic Outcomes in Sub-Saharan Africa". Center for Global Development. February 27, 2023. Link
- ⁵³ "Africa Tech Venture Capital Report 2022". Partech. 2022. Link
- ⁵⁴ "Women-led tech startups on the rise in Africa". Toesland, Finbarr. United Nations. August-November 2018. Link

- 55 Ibid Diversity Dividend
- ⁵⁶ "African Startup Funding: Who is Getting Backed?". Global Private Capital Association. April 2023. Link
- ⁵⁷ West, Collin and Sundaramurthy, Gopinath. "Women VCs Invest in Up to 2x More Female Founders". Kauffman Fellows. March 25, 2020
- 58 "Capital Evolving: Alternative Investment Strategies to Drive Inclusive Innovation". Village Capital. January 2019. Page 5. Link
- ⁵⁹ "À propos de l'instrument". Startup Tunisia. Accessed January 2024. Link
- ⁶⁰ Campos, Francisco; Goldstein, Markus; McGorman, Laura; Munoz Boudet, Ana Maria; Pimhidzai, Obert. "Breaking the Metal Ceiling: Female Entrepreneurs Who Succeed in Male-Dominated Sectors in Uganda." April 20, 2016. Link
- Africa Region Gender Practice Policy Brief; No. 9. World Bank. 2014. Link
- ⁶¹ Interview with Ifeoma Uddoh, Shecluded, May 19, 2023
- 62 Interview with Dr. Imen Hbiri, Robocare, 2023
- ⁶³ Interview with Hawa Sy Berete, MCC Cote d'Ivoire, June 6, 2023
- ⁶⁴ "The African Tech Startups Funding Report". Disrupt Africa. 2022. Page 17. Link
- 65 "Funding for female-led start-ups: are accelerators widening the gender gap?". WEF. January 27, 2021. Link
- 66 "Brain Drain' Hits Africa's Tech Developers", October 12, 2022, SciDev, Net, Link
- ⁶⁷ "Report On The Implementation Of The Oecd Gender Recommendations". OECD. June 9-10, 2022. Page 46. Link
- ⁶⁸ "Bringing Rwanda's Innovation Community Together". Innovate Rwanda. 2024. Link
- ⁶⁹ Assenova, Valentina. "Early-Stage Venture Incubation and Mentoring Promote Learning, Scaling, and Profitability Among Disadvantaged Entrepreneurs". Journal of Organization Science. Vol. 31, No. 6. October 22, 2020. Link
- ⁷⁰ "Benchmarking Small Business Acts and Startup Acts". I4Policy. 2023. Page 50-51. Link
- 71 "Where are the Women? Gender Equality in Public Administration in Africa". UNDP and University of Pittsburgh. 2022. Link
- ⁷² Deloitte analysis of 15+ national policies in Africa on entrepreneurship and MSMEs
- 73 "Startup Acts: An Emerging Instrument to Foster The Development Of Innovative High-Growth Firms". ICR. September 2021. Page 6. Link
- ⁷⁴ "The Evaluation of the Italian "Start-up Act". OECD. 2018. Link
- 75 Ibid, I4Policy Benchmarking Report. Link
- ⁷⁶ Deloitte analysis of 15+ national policies in Africa on entrepreneurship and MSMEs
- ⁷⁷ "National Policy on MSMEs". Federal Republic of Nigeria 2015. Page 39-40. Link
- ⁷⁸ Ibid, National Policy on MSMEs.
- 79 "Ghana Startup & Innovation Bill". Ghana Startup Bill. 2024. Link
- ⁸⁰ Ibid, Ghana Startup & Innovation Bill.
- 81 Dahlum, Sirianne et al. "Women's political empowerment and economic growth". World Development Volume 156, August 2022, 105822. Link
- 82 "Bridging the Gender Gap: Promoting Women's Financial Inclusion". Alliance for Financial Inclusion. 2017. Page 8. Link
- 83 "How female-led start-ups can transform Africa". WEC. August 19, 2022. Link
- 84 "2021 Annual Report: Pivoting toward a resilient future". International Trade Centre. We-Fi and IFC. 2021. Link
- 85 "World Population Prospects 2022". Department of Economic and Social Affairs Population Division. 2022. Link