

Unrealized Potential:

Female Entrepreneurship and the Digital Gender Gap in Sub-Saharan Africa

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Promoting entrepreneurship, technology adoption, and gender equality is essential for economic growth. However, women still face significant hurdles in Africa, hindering their entrepreneurial pursuits. To overcome this, gender-inclusive institutions are needed. This article focuses on challenges women encounter in entrepreneurship, including market systems favouring men and the widening digital gender gap in sub-Saharan Africa. Recommendations are provided to empower women through entrepreneurship, employment and digitalization, fostering a more equal economy and improved socio-economic conditions.

The socio-economic development of any society can only be accelerated if barriers to women's economic empowerment are eliminated. In most countries, women make up a larger percentage of the population than men, even in the labour force. For example, in Malawi, 73 percent of women are in the labour force, which means they have the potential to contribute to the socioeconomic activities of the country as much as men.² According to the World Bank, the global labour force participation rate for women is just over 50 percent, which is indicative of how much women in Malawi would significantly contribute to its economy if their potential were leveraged.³.Further, there have been arguments that women play a crucial role in growing free market economies, and entrepreneurship is one of the confirmed ways through which women can

contribute.⁴ Most governments have been trying to create gender equal economies by introducing regulatory frameworks create employment and promote innovation. Many governments have taken steps to enhance the environment for women at work, including supporting women entrepreneurs.

In addition, the United Nations General Assembly adopted the 2030 Agenda for Sustainable Development Goals (SDGs), to achieve gender equality and empower all women and girls (Goal 5) and to promote sustainable, inclusive economic growth, productive employment and decent work for all (Goal 8). Entrepreneurship has been proven as one of the strategies that can be used to promote inclusive growth, and hence create employment. Kritikos (2015)⁵ stated

that entrepreneurship is considered as a driver for economic dynamics, because beyond job creation, entrepreneurs enter the market with new technologies and products. They also encourage structural change and increase competition and productivity; hence, the absence of entrepreneurship may stagnate an economy. In addition, the SDGs aim to encourage sustained economic growth by achieving higher levels

of productivity and technological innovation, specifically encouraging women to participate in using digital technologies. In essence, promoting policies that encourage entrepreneurship and job creation are key to this, and they are effective measures to eradicate unequal economies, especially in developing countries with high gender gaps and low rates of women in entrepreneurship and employment.⁶

The state of entrepreneurship in sub-Saharan Africa

Countries in sub-Saharan Africa (SSA) have shown digital advancement, which has consequently improved entrepreneurial efforts. Countries such as Ghana and Rwanda have improved their digital infrastructure, including advancements in their internet connectivity,⁷ a vital aspect of entrepreneurship.

Despite countries striving to promote entrepreneurship, scores of sub-Saharan African countries are poor, as evidenced by low rankings on the Global Entrepreneurship Index. Unfortunately, COVID-19 worsened the situation in some sub-Saharan African countries.8 For example, in a report by Public Knoema Data Hub (2019), Malawi ranked 132 out of 137 on the Global Entrepreneurship Index in 2019. Canada, Switzerland and the United States ranked as the top three, while Burundi, Chad and Madagascar constituted the bottom⁹ .When compared to Asia, studies have shown that sub-Saharan Africa has a higher rate of female entrepreneurs at approximately 26 percent; however, women continue to earn less from entrepreneurial activities compared to their male counterparts,10 which contributes to why the ranking of female entrepreneurs, specifically in Africa, is poor compared to other continents, as depicted in the global female entrepreneurship database. Consequently, fewer 'high potential' female entrepreneurs result in fewer ideas being realized, less innovation, less export potential, and fewer jobs created.11 The involvement of women in entrepreneurial activities warrants an increase in their economic welfare, which would further improve the economic and social fabric of the society through creating innovative products,

processes, services and engagement in cross-border trade.¹²

"Leave no one behind" is the centre, transformative strategy of the multi-stakeholder-driven United Nations 2030 Agenda for Sustainable Development and its SDGs. However, despite the introduction of free economies and markets, where everyone is free to participate, some sub-Saharan African countries, like Burundi, Chad, Madagascar and Malawi, have failed to establish an entrepreneurial environment, and aspirations to bring women who face numerous barriers, to engage in entrepreneurship.¹³ The barriers stem from cultural, institutional, economic, political and social contexts as well as their access to a friendly, supportive environment.14 As indicated by the Global Female Entrepreneurship Index cross regional analysis in 2015, most African and Asian countries score below 50 compared to Europe and United states, as seen in Figure 1. The Global Female Entrepreneurship Index analyses three main variables, namely entrepreneurial environment, entrepreneurial eco-system and entrepreneurial aspirations. Most sub-Saharan African countries are below the 60th percentile, which indicates underlying challenges that affect female entrepreneurship and employment, hence widening the gender digital gap, which affects more women than it does men. This gap has been evidenced in the funding opportunities available for women start-ups, the digital presence of women on digital platforms and the digital financial services available to women. This is further exacerbated by the lack of disaggregated data, which can inform the gender gaps in entrepreneurship.15

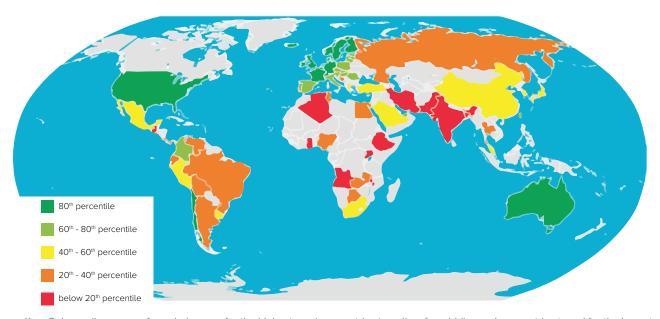


Figure 1. Global female entrepreneurship data

Key: Color coding ranges from dark green for the highest scoring countries to yellow for middle scoring countries to red for the lowest scoring countries

Source: Adapted from Global Female Entrepreneurship Index Data

Linking the digital gender gap and entrepreneurship in sub-Saharan Africa

The link between digitalization and entrepreneurship is inextricable. We live in an era where technology is growing exponentially. In the post-COVID-19 era, working from home and the use of technology has been on demand. Digital technologies have a major impact on businesses, as they play a role in providing new valueproducing opportunities, which is crucial for the survival of any business.¹⁶ It is apparent that digital technology has changed the way that businesses operate, which provides chances for entrepreneurs, including females, to join global value chains, evidenced in how online payments and other e-commerce innovations simplify trade across borders and enable entrepreneurs to reach new markets, regardless of their locations. Additionally, digital platforms help to remove barriers that female entrepreneurs usually face when trying to register their businesses, enroll in entrepreneurship programmes, build new networks and skills and take part in financial transactions. These facilities are missing in sub-Saharan Africa, especially in remote areas.17

It is well established that women are a great resource to be harnessed in employment creation,

and they need adequate digital skills to be productive. However, with less women engaged in entrepreneurship in sub-Saharan Africa, there are less women engaged in job creation, even in the digital sector. Further, in rural areas, most women face demographic barriers and demotivation to engage in entrepreneurship, causing a gap in skills compared to men. In extreme cases, women lack the basic skills required to engage in innovative business. This calls for the adoption of a social, cultural, political and economic framework. The Global Female Entrepreneurship Index indicates that strong economic and political institutions, societal values, and close collaboration between the private and public sector can help with addressing the entrepreneurial challenges and the digital gap that women face. Further, calling on policymakers to tackle the digital gender gap means more than improving internet access; it means empowering women and girls to use online technology, preventing online gender-based violence and addressing discrimination in emerging technologies.¹⁸ Further, this will help in incorporating individual attributes and creating different levels of entrepreneurship for socio-economic development.

Gender equality through elimination of the digital gap

Gender equality will not be achieved until we eliminate the existing digital gap in sub-Saharan Africa, which keeps so many women offline and away from the entrepreneurship opportunities the internet provides.¹⁹ The Global Competitive Index lists technology as essential for creating a competitive environment to deliver value in a society; however, this requires every entrepreneur, including women, to possess adequate technological skills. Unfortunately, studies have revealed that contrary to developed countries whose population is online with close to 87 percent of individuals using the internet, the least developed countries in SSA are not 'connected', with only 19 percent of the population using the internet.²⁰ Europe has the highest internet usage rates and Africa has the lowest. This might be because of less soft and hard infrastructure and economic institutions that do not support innovation for entrepreneurs to

adopt or invent new technology. The Female Entrepreneurship Index highlights innovation, skills, quality human resources, gender gaps and other factors, as shown in Figure 2, as crucial to supporting female entrepreneurship. Further, research on general entrepreneurial ecosystems suggests that higher-quality businesses result when entrepreneurs are motivated by opportunity rather than necessity, and countries that restrict freedom for women have lower female labour market participation, including lower rates of female entrepreneurship.²¹ This calls for creating an entrepreneurial ecosystem and environment favourable for women and seeing that women are involved in the tech sector, thus eliminating existing gaps. To support female entrepreneurs, the women must have adequate start-up skills, product innovation, and networking, as shown in Pillars 1, 7, 4, 10 and 11 in Figure 2.

Figure 2. Factors that support high potential entrepreneurs

Entrepreneurial environment Entrepreneurial ecosystem Entrepreneurial aspirations Pillar 11: Product innovation Pillar 1: Opportunity perception Pillar 6: Opportunity start-up Opportunity perception Opportunity business New product Equal Rights & market size Business freedom Technology transfer Pillar 2:Start up skills Pillar 12: Process Innovation Pillar 7: Technology sector New technology Perception of skills Tech sector business Secondary education Tech absorption R&D expenditure Pillar 3: Willingness and Risk Pillar 13: High growth Pillar 8: Quality of Human resources Willingness to start Highly educated Business gazelles Small business support & training Business risk Leadership Pillar 4: Networking Pillar 9: Competition Pillar 14: Internationalization Export focus Know an entrepreneur innovativeness Access to internet & networks Monopolized markets Globalization **Pillar 5:Cultural Support** Pillar 10: Gender gaps Pillar 15: External financing Executive status Entrepreneurship ratio First-tier financing Labor force parity Third-tier financing Access to childcare

Source: Adapted from 2015 Global Female Entrepreneurship Index report

Digital misconceptions and entrepreneurship in SSA

The digital gap between men and women's participation in the education sector, career and entrepreneurship opportunities continues to widen in SSA. This gap is partly the result of persistent beliefs on gender differences in technical capacities and common misconceptions about what the appropriate roles are for each gender in the labour market.²² Further, there is a significant challenge regarding digital infrastructure. For example, intentional design that establishes public internet access points in safe spaces and other interventions that support the closing of gaps and improve the affordability of devices and data plans as well as tailor digital skills programmes for women are a challenge in SSA.23 In addition, digital financial services, which enable digital payments

are also a barrier, as these are not regarded as a necessity for women. Harmful cultural beliefs hinder women, who may be discriminated against and are not guaranteed digital safety.²⁴ Despite being more pronounced in South Asia where women are 26 percent less likely to own a mobile phone than men, there is an apparent gap between women who can access and use mobile internet across regions within sub-Saharan Africa, with the mobile gender gap at 37 percent.²⁵ Europe is the best region, with more women having access to the internet as European countries are more advanced in soft infrastructure, and women have the required technological skills compared to Africa and Asia, where many women drop out of school without completing secondary education.

Skill development as a mitigation measure of the digital gender gap and entrepreneurship in SSA

In SSA, the gender digital divide indicates the biases, barriers and constraints that prevent women and girls from fully adopting and using digital technologies in their lives. ²⁶ Literature has proven that complementing technical skills training with soft skills, engaging role models, and creating structured linkages to the labour market through internships, apprenticeships and job placement programmes have proven to have positive outcomes on entrepreneurship. ²⁷ The global entrepreneurship report established five foundational pillars of the digital economy: digital infrastructure, digital public platforms, digital financial services, digital businesses and digital skills trainings. These can be adopted in SSA to

promote female entrepreneurship, which is strongly linked to digitalization. Further, strong and inclusive political and economic institutions that support business sophistication and innovation are crucial in supporting the entrepreneurship processes, productivity and job creation. Strong institutions will help create a conducive environment that promotes transparency and accountability in the allocation of resources. Such organizations will also protect property rights, uphold the rule of law, and promote innovation to foster inclusive growth and development for female entrepreneurs in this digital era. In essence, these institutions will help women obtain the necessary skills and resources to gain access to technology.

A conceptual model to harness women to create an equal economy through entrepreneurship and digitalization

Over time, the number of women-owned businesses has increased around the world, and in the last decade, women have begun to be recognized as successful entrepreneurs when structural adjustment initiatives and government backing are considered.²⁸ However, female entrepreneurs face challenges especially in sub-Saharan African countries due to weak economic and political institutions. In addition, female entrepreneurs face a battle of wills, a fight against cultural norms and the

ability to survive against all the odds compared to men. In addition, women, particularly women in SSA, have the ability to venture into entrepreneurship and create employment just like men; however, the environments in which they operate are not enabling.

This situation calls for a model to mitigate the current entrepreneurial challenges and confront technological barriers that hinder women's ability to

create employment. Strong, inclusive political and economic institutions will help to create educational systems that will help women tap into skills and use technology by championing women's rights and digital rights. Developing policies that ensure that women are free from discrimination and safe is a step towards strengthening institutions that address these entrepreneurial challenges. Increasing internet access and affordability is also a step towards mitigating these challenges. This includes governments working with private sectors to provide subsidies to reduce internet costs, especially for women across Africa.

Further, strategies ensuring digital inclusion will aid in the creation of channels that will lead to mindset change, such as access to online training and ending harmful cultural practices that hinder women from using online technology and take advantage of economic activities available to them by raising awareness of their digital rights, laws and policies that ensure their protection and inclusion. This will result in societies that support women, tap digital skills and create jobs which will lead

to a gender equal economy. For example, Ghana has established a digital inclusion programme that ensures that 60 percent of local people that sell their services are women.²⁹

Additionally, strong political and economic institutions that support business sophistication and innovation are crucial in supporting entrepreneurship processes, productivity and job creation, as technology is an important factor in human capital creation but has low ranking in SSA. Strong economic and political institutions are inclusive. They create the right environment for resource allocation, learning and enabling property rights for owners to protect their investments. They further create a dependable legal system, allow for disputes to be resolved, contracts to be enforced, and money to be borrowed and lent. Strong institutions create competitive and open markets, prevent inefficient and unnecessary regulations, prevent monopolies and allow for innovation and growth. These institutions will help women obtain the necessary skills and resources to gain access to technology.

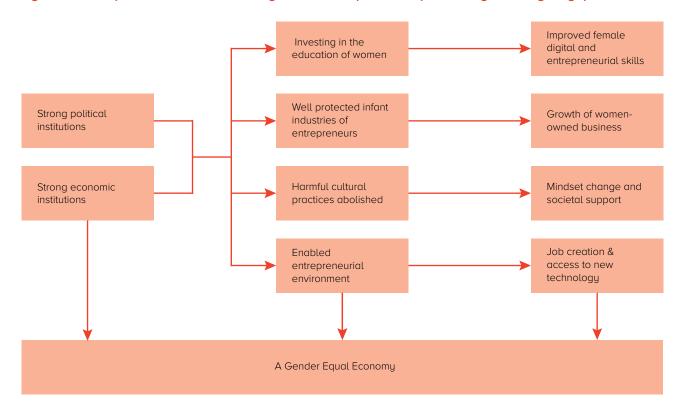


Figure 3. Conceptual model for harnessing female entrepreneurship and the gender digital gap

Source: Own construction from reviewed literature and data

Conclusion

Every country needs basic requirements, efficiency enhancers and innovation to ensure productive, efficient and prosperous entrepreneurs that will consequently create a gender equal economy. For entrepreneurs to flourish in an economy, innovation and business sophistication factors should be considered. However, developing countries do not have strong basic requirements and have extractive economic and political institutions with little citizen participation; this continues to create unequal economies despite government interventions to protect green field start-ups. Strong inclusive

political and economic institutions, which will help in the creation of improved education systems for women, abolish harmful cultural practices that hinder female entrepreneurs and create entrepreneurial environments and ecosystems are needed. Additionally, strong educational institutions will result in improved digital skills and mindset changes following the elimination of harmful cultural practices. Such changes will inevitably create entrepreneurial links and competitive environments.

Key Insights for the Operationalization of UNDP's Gender Equality Strategy 2022–2025

- UNDP should prioritize digital research and development and establish innovation hubs across Africa.
 These research and development hubs should focus on such areas as technology, digital skills, and digital financing. Moreover, UNDP can provide funding for projects that promote incremental innovation and the adoption of technology to support women entrepreneurs.
- UNDP should provide scholarships to talented young women studying business or entrepreneurship, enabling them to participate in exchange programmes and gain insights into business strategies and digital technologies from other countries. These women will then be able to implement these learnings in their home countries. Additionally, UNDP should collaborate with local governments to sponsor female university students' research on the business environment, guiding female entrepreneurs on potential investment opportunities. This research can also help identify budding female entrepreneurs and offer them seed capital. Female entrepreneurs can be encouraged to support research topics that align with their business interests.
- UNDP should back initiatives that strengthen inclusive political and economic institutions, empowering women to actively participate in driving economic growth. This entails supporting projects like E-governance, which enables female entrepreneurs to voice their concerns and ideas through online platforms, without the requirement of holding a political position.

Endnotes

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