Youth in Digital Africa

Our connections.
Our choices.
Our future.

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Acknowledgements

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Preface
Being young in digital Africa

While writing this preface, I took some time to reflect on my earliest interaction with digital technology. This happened while I was in elementary school, at the house of Mrs. Amadi [pseudonym], a female politician who lived nearby. One day while playing with friends outside Mrs. Amadi's house, the landline telephone rang. We ran into the house and I pleaded for an opportunity to take the call. When I said hello, I heard a voice on the other end of the line.

Raphael
Nnaemeka Ajima
Youth panelist (Nigeria)

Speaking on a phone for the first time was both nerve-wracking and exciting. It piqued my curiosity and left me wondering how the telephone "rang out sounds" and how a human voice "passed through the cable." It became clear to me as a preteen living in Nsukka, Nigeria, that I was living in a marvelous world—a digital one at that.

My story is only one piece of the pie. Over six months, at the invitation of the Mastercard Foundation, 20 young people from across Africa gathered to discuss and reflect on being young women and men in digital Africa. We shared stories, reflecting on each other's very diverse experiences of using digital technologies as young men, women, students, entrepreneurs, refugees, and young people with disabilities. Those conversations and reflections resulted in this publication.

The report explores five themes. The first section discusses **access** to the internet and digital technology. In the second section, we discuss **skills** for the digital age, bringing to light some of the critical skills that have enabled

us to access and use various digital technologies. We deliberate on the what it means for a young person to have a **voice** in the digital age in the third section. In the fourth, we talk about how digital technology has shaped the **jobs and livelihoods** landscape for us in so many ways. The final section discusses the power of **choice** in a digital age and how it is linked to our independence and confidence.

As you read, you will notice how these themes are interconnected. For instance, it is difficult for young people to fully participate in the digital economy if they don't have access to technology and skills. Access and digital skills not only unlock choices for young people but are also a key to jobs and livelihoods. Access to digital technology also gives us a voice through which we share ideas, thoughts, and information.

I enjoyed being a part of the youth panel. My sincere gratitude to the Mastercard Foundation for bringing us together to unpack our experiences. I hope the experiences we share in this report point to what we in Africa must do to ensure today's and tomorrow's generations harness the full potential of digital technology.

Raphael Nnaemeka Ajima
Youth panelist (Nigeria)

A word from all of us

It was an honor for us to come together online to discuss our experiences with digital technologies. We come from different parts of Africa and, between July 2022 and December 2023, we shared experiences, listened to and reflected on each other's stories. This shared space, made possible by the Mastercard Foundation, was facilitated by Caribou Digital, who helped to guide our conversations.

Panelists included: Anastestia Onyinyechukwu Onyekaba, Bandagne Fall, Erica Matasi Gateka, Ezekiel Akintobi Ayomide, Faith Musyoki, Hussein Tadicha Jillo, Jemima Adjanor, Mihret Walelgne, Moses Serwadda, Nafisa Abdulaziz, Papi Sibomana, Patience Ahumuza, Rachael Athiak Makuei, Raphael Nnaemeka Ajima, Rebecca Turyatunga, Sandra Brew, Sharon Tarit, Victor Akinnibosun Abayom, Viola Nanteza, and Yvonne Uwicyeza Nkaka.

Introduction

Youth are the leaders of today, not tomorrow. Youth voices must be seen and heard for change to occur. In that spirit, this initiative pulls together the voices of dozens of young Africans to document how we are using digital technologies to shape our futures.

The prevalence of digital technology in our lives is undeniable. It has become deeply ingrained in every facet, transforming our communication, work, education, and entertainment. By sharing our experiences, we not only showcase the impact of digital technology but also offer insights into how we can optimize its benefit to young people. Through our narratives, we aim to propose effective strategies for harnessing digital technologies.

We acknowledge that many of our peers across the continent do not have the access to technology we speak of throughout this report. The youth digital divide remains deep and wide because of poor connectivity infrastructure, the high cost of internet data and devices, biased gender norms, and a lack of digital skills.

This publication is a reflection of many inputs, resulting in a collective "we." In the report, "we" is a combination of the 20 youth panelists, Caribou Digital, and the voices of more young people from reviewed literature. The Mastercard Foundation and Caribou Digital provided the space that enabled the conversations and co-creation of this publication. We acknowledge that the views expressed in this report do not reflect the perspective of all youth in Africa but those of the young people selected to be part of the youth panel, across the spectrum of gender, location, disability, and citizenship status. There are similar shared experiences with digital technologies among youth around the globe, but in this report we share our experience with digital technologies as Africans.

Figure 1 ▾

Methodology map

HOW DID WE WRITE THIS REPORT?

Reading
Reviewed 300+ Mastercard Foundation reports and coded 50 of them

Framing
Discussed coding framework and findings from reports

Gathering
Gathered together over Zoom from places all around the world

Outlining
Based on the reports and our experiences, discussed and agreed on an outline

Sharing
Shared our experiences as digital natives via Zoom, email, and WhatsApp audio messages

Coding
Looked for common themes and threads among stories and reports

Writing
Wrote, edited, and reviewed in two cycles of feedback

Sharing
Shared the report with the wider world

Methodology

The methodology map in Figure 1 illustrates our journey of co-creation. We used technology to our advantage to collaborate across numerous countries on three continents. We reviewed over 300 reports published by the Mastercard Foundation, for descriptions of young people's experiences with digital technologies in Africa. Next, we developed and agreed upon a framework of themes related to these experiences. Using this framework as a springboard, we gathered on Zoom and WhatsApp to share our own personal experiences with digital technologies and how they have shaped our lives. With these stories, and those gathered from published reports, we wrote and edited this report. For more details on the methodology, please see *Appendix 1*.

Our conversations and review of reports brought out key issues on experience with digital technologies. We found five interconnected themes that capture the breadth and depth of these experiences:

· Digital access

· Skills for a digital age

· Jobs and livelihoods

· Voice

· Choice

Throughout the following sections, there is a thread of the unique experiences of young women, young people with disabilities, young refugees, and youth who live in rural areas. These are important but often silenced and marginalized people who deserve to be seen and heard. However, each of us is more than just our gender, our abilities, our residence status, or our geographical location. We are each a beautiful and unique mix of these identities and experiences, resulting in this report.

A note on artificial intelligence

The development of this report predates the widespread emergence of generative AI (gen AI), but we cannot ignore its transformative impact on our daily lives. This powerful technology holds immense potential for young Africans, offering jobs, creativity, entrepreneurship, learning, education, productivity, and even healthcare opportunities. Thus further research is needed in this area.

However, the potential for unequal access, job displacement, ethical concerns, and privacy issues require careful consideration and proactive measures. To ensure we, as a young continent, reap the benefits of gen AI, we must prioritize the following:

Strategic policy development: Governments must implement policies encouraging responsible AI development and deployment, ensuring equitable access while mitigating potential risks.

Investments in education and training: Educational institutions and training programs should equip young Africans with the skills and knowledge needed to thrive in an AI-powered world.

Open collaboration: Collaboration among stakeholders, including youth, governments, the private sector, academics, and civil society, is essential for responsible and inclusive AI development.

Investment in robust digital and sustainable energy infrastructure: Building and maintaining a robust internet infrastructure is crucial for facilitating access to AI technologies and promoting digital inclusion. An internet built on the foundation of reliable electricity and renewable energy is the key to unlocking AI's potential for everyone.

Decolonized approaches to AI: Decentering Western perspectives and actively incorporating African voices and perspectives into AI development and deployment is critical.

Digital access

Sandra Brew
Youth panelist (Ghana)

"We struggle to get online, and this makes us miss out."

My name is Sandra Brew. I live in Takoradi, Ghana. Growing up, I had access to a computer and could navigate my ⸱⸱ around it. One of my fondest memories is learning how to type with ⸱⸱ software "Mavis Beacon Teaches Typing." Knowledge about computers gave me confidence, which has shaped my thinking to date. Today, I am an entrepreneur partly because of access to digital technology and the internet.

I was inspired to start the business that now enables me to pay my school fees by a film I watched on Netflix. The film, *Smart Money Woman*, was about a woman who used to spend all her money shopping before she decided to invest in a business. This got me thinking about business. No one was selling frozen foods around my hostel, and I grabbed the opportunity to start a frozen food business.

While some of us are benefiting from access to digital technology, I am aware that many are not. For example, as a volunteer on an outreach trip I noticed that some of the young women whom we were engaging did not have the opportunity to use a smartphone, the internet, or a computer, like I have. Many young people in Africa, especially those in remote areas, have limited access to smart devices, and the internet connectivity is poor.

When young people are unable to connect to the internet, we miss out on life online, including education, work opportunities, and life-saving information. For example, if, as a young girl, you get confused about your body when you start menstruating, you can go online and find information to help you understand what is happening to you. But some of the girls I meet cannot do this because they don't have access.

As you read about our lived experiences in this report, you will see how having access has opened doors for us, while not having access hinders our growth. I hope this section will show you the need for us to get access—from having the right devices to getting affordable internet.

With good leadership, more resources, and the ingenuity of Africa's young people, I believe the continent can achieve this dream. Enjoy the read!

More Africans are connected to mobile internet than ever before, but a growing percentage live in mobile broadband areas and do not use it. While the coverage gap is reducing every year, the usage gap (i.e., a lack of usage among the population for a variety of reasons), persists.

■ Connected ■ Usage gap ■ Coverage gap

Year	Connected	Usage gap	Coverage gap
2020	28%	53%	19%
2019	26%	51%	24%
2018	23%	48%	29%
2017	20%	44%	36%
2016	18%	40%	42%
2015	16%	37%	47%
2014	13%	36%	51%
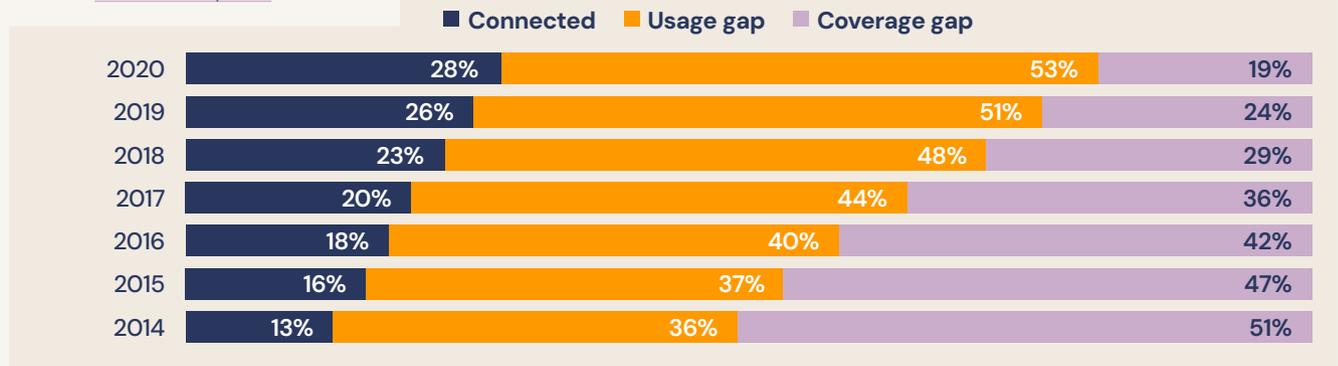
More **African youth** are using the internet compared with their **elders**, but still lagging behind their peers globally.

■ Youth ■ Rest of the population

Region	Rest of the population	Youth
Europe	88%	99%
Americas	81%	94%
Russia & Central Asia	83%	91%
Arab States	68%	80%
Asia–Pacific	63%	73%
Africa	36%	55%
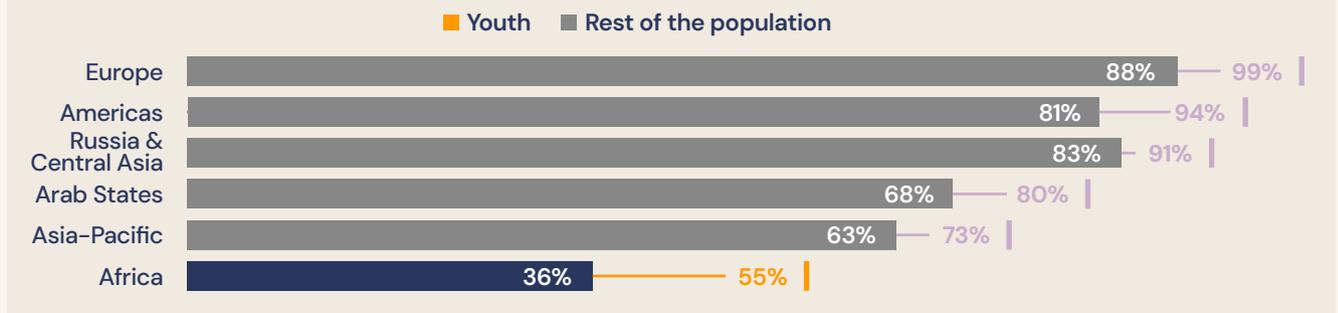
3.3%

of average monthly income in **Africa** covers the cost of 1 GB of mobile data, compared with:

2.3% in the Americas

1.1% in Asia

The top four

countries with the highest internet poverty (as a percentage of population) are in Africa:

Chad Madagascar
Mozambique Burundi
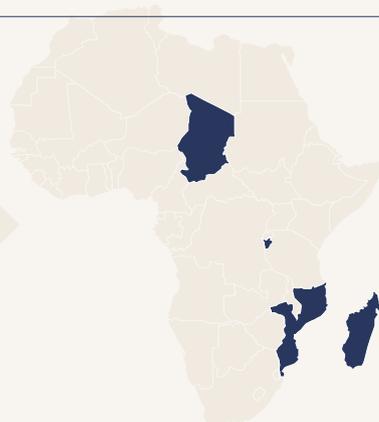
INTERNET POVERTY

The number of people who can or cannot afford a minimum package of mobile internet.

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What digital access means for youth

At face value, access might simply mean having the required devices and internet services. However, for us as young people in Africa, access is multi–faceted. Access means:

A window to the world. An internet-connected phone or device makes it possible to see and learn about the world.

Affordable hardware, software, and internet. Access comes at a cost, and that cost determines our level of use.

Available, stable, and fast internet. Access alone is not enough. Internet should be available at reliable levels that enable us to attend online courses or to work online. We should not be limited by infrastructure or geographical location, such as rural areas.

Accessible hardware and software for those with disabilities. Those who are visually impaired or hard of hearing have additional access needs to take advantage of opportunities online.

Unrestricted use of the internet. Young people should be able to access the internet without interference from authorities, such as governments or family.

Digital access as meaningful connectivity

In 2019, the Alliance for Affordable Internet and the Web Foundation proposed a new way to look at access. "Meaningful access" goes beyond merely being online to include:

1   **The right speed:** Users need sufficient download speeds to access multimedia and other applications that make up a full internet experience. A 4G mobile connection is the minimum threshold.

2   **An adequate device:** Users must be able to both produce and consume content online. A smartphone offers the functionality to create and consume content in a way that basic phones do not. Mobile-only access is not the same as access via a laptop or desktop, because a full physical keyboard is better suited to content creation and productivity.

3   **Unlimited broadband connection:** An unlimited broadband connection at home, workplace, or school provides reliable internet access for daily use, supporting access to the full breadth of the internet's potential.

4   **Frequent connection:** Daily access to the internet is the minimum for one to see real benefits for work, education, and communication.[1]

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1   Jorge and Thakur, "Raising the Bar for Internet Access: Introducing 'Meaningful Connectivity.'"

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Our experiences with digital access

We were born into a world on a high-speed train to digitalization. We were introduced to digital technologies by family members, community members, and teachers. These experiences remain with us because they marked the start of our digital journeys.

"The first time I used a computer was [when a lady in our community] had a computer store very close to where we lived. She did computer typewriting, lamination of documents, photocopying, and all that. Each time I came back from school, I would go to her store just to watch her type on the computer […] which I thought was very fascinating. She allowed me to come often because, I guess, she saw I was very curious and interested in learning. Sometimes I would bring her food from my mom's restaurant so she could allow me to come into her store to just watch her use the computer."

Raphael, youth panelist (Nigeria)

But while family and community members may have been the first to introduce us to digital technologies, their beliefs around social norms, gender, and use of digital technologies sometimes limit this access, particularly for young women.

"I really want to be with a phone, but my husband does not accept me having a phone […] because he gives a reason that phones spoil women. The reason he gives is that the moment a woman gets a phone, she gets spoiled … she might end up being taken up by other men."

Young female business owner (Uganda)[2]

By the age of 18, most of us had a phone and access to a computer and the internet at home or school. This, of course, is not representative of all African youth. This early exposure to and use of technology was very important and has had a huge impact on our lives. Interaction with various digital technologies intersects with many elements of our lives, such as work, livelihoods, community, family, and school, with both positive and negative effects.

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2   Banga, Njambi–Szlapka, and Phiona, "Youth Enterprise Growth: Evidence from Youth Forward in Uganda."

Access creates meaningful connections to networks and community

Being able to connect with the rest of the world, especially like-minded youth living thousands of miles away, is important. These connections are made through online meetings or via social media. They sometimes lead to opportunities, but most often expose us to new ideas. We value being part of the spaces where ideas are exchanged, such as now common-online gatherings.

"I use Facebook to market my work [advocating for persons living with disabilities] to the outside world. This has made it possible for me to have a bigger network of people who value the kind of work engagements that I do [and] has linked me to bigger opportunities."

Moses, youth panelist (Uganda)

Access to platforms, like social media, also connects us to others in similar jobs, careers, or situations. We like to share our knowledge with others who may not have access to hardware or the internet. This is especially important for youth in rural areas, as a participant from the Youth Empowerment Through Agriculture (YETA) initiative in Uganda shared during the evaluation of the program.

"I would get good advice on how to treat even my piggery [and] how to plant crops. So you would just Google and get all the information through this platform, then advice from friends who are also in this platform."

Young male business owner (Uganda)[3]

During the COVID-19 pandemic, access to the internet enabled us to draw from global communities, networks, and initiatives to cope with mental challenges.

"I attended online training on Trauma Release Exercise (TRE), which helped me to acquire skills that I am using for healing and peace circles in my community. I also attended [an] online global youth peace summit where I was able to share my story which help[ed] me to heal and create a safe space for others to heal and embrace and adjust to the situation."

Student (Kenya)[4]

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3   Banga, Njambi-Szlapka, and Phiona, "Youth Enterprise Growth: Evidence from Youth Forward in Uganda."
4   Diepeveen and Phiona, "Youth-Led (Digital) Innovation and Resilience during Covid-19: Experiences from the African Continent."

The pandemic illustrated the importance of digital access

The COVID-19 pandemic revealed the critical value of access, especially to digital platforms and technologies. Many of us closed our businesses due to lockdown regulations, but access to internet-enabled devices helped some of us to keep businesses running by shifting some processes online. A survey of youth entrepreneurs in Kenya, Rwanda, Uganda, Ghana, and Ethiopia mid-pandemic found that at least 15% of young people moved business online or increased sales online.[5]

"My income has slightly increased because I started a new business. I do online sales. I post products like construction materials and electronics from different importers on a sales app and get paid for every sale made."

Young male business owner (Ethiopia)[6]

Some of us took free online courses, including those covering digital skills and business-related training such as: product-making, digital transformation, information security, project management, entrepreneurship, and web design.

"With the lockdown I force[d] myself to practice my profession through online resources like YouTube, conferences, and meetings which add so much knowledge to me and [allow me to] make so much income."

Student (Uganda)[7]

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5   Digital Opportunity Trust, "Speaking out, Reaching out: COVID-19's Impact on Youth Entrepreneurship in Sub-Saharan Africa."
6   Digital Opportunity Trust, "Speaking out, Reaching out: A Youth-Led Investigation into the Impacts of COVID-19 on Young Women and Men in Africa."
7   Diepeveen and Phiona, "Youth-Led (Digital) Innovation and Resilience during Covid-19: Experiences from the African Continent."

Access helps us think outside the box

Access to digital technology enables us to be more creative and innovative.

"I think availability of stable internet and other computer-related equipment can accelerate the rate of innovation among the youth. There is a lot of information on the internet that helps the youth research and become innovative in different fields, thus solving most of the world's problems through digital innovation by teaching themselves through information acquired from the internet."

Student (Uganda)[8]

For example, during the COVID-19 pandemic, one young man in Uganda used WhatsApp to provide critical information to his peers.

"I am leading a team of innovators from Kampala Deaf youth club in developing digital learning content aimed at increasing access to SRHR [sexual and reproductive health rights] information and services among young people with hearing impairment in Uganda. Given the existing communication barriers due to limited sign language skills among most sections of the population, digital platforms like WhatsApp and smartphones have been of help in regard to access to relevant information since the occurrence of COVID-19."

Young man living with a disability (Uganda)[9]

Access and skills are interlinked

We are surrounded by digital technology, and we must keep learning how to use it. Having access to devices like phones or computers, whether at school or at home, helps us to develop the skills we need to use new technologies as they come. We may have accessed digital technologies from an early age, but we were not born with digital skills. Without access to devices, it would be difficult to keep learning, improving, and adopting new technologies in ways that benefit us. The International Telecommunication Union rightly

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8   Diepeveen and Phiona, "Youth-Led (Digital) Innovation and Resilience during Covid-19: Experiences from the African Continent."
9   Diepeveen and Phiona, "Youth-Led (Digital) Innovation and Resilience during Covid-19: Experiences from the African Continent."

warns that children and youth who lack digital skills may encounter new forms of marginalization and find it difficult to access the services they need, impacting opportunities for learning, health, and work.[10] Therefore, developing these skills at a young age is critical to our success in today's digitalized world.

For youth with disabilities, learning to use assistive technology is vital. It enhances access to and sharing of information and opens educational and job opportunities. Papi shared a story of how a young woman with a visual and hearing disability was able to fully participate in a conference because she had access and the skills to use assistive technology.

"Recently, I was in a meeting, and I was happy to see a deaf-blind [person] participating in a conference using technology. She was audible. Everyone was able to hear what [she] was saying. She has an assistive device that reads aloud what she types."

Papi, youth panelist (Rwanda)

Access to devices and the internet enables us to further develop our digital skills by venturing into areas like software development or programming. Such advanced skills are crucial to future employment prospects.

"Digital technology has provided me access to skill acquisition as an individual in tech. All I can say is 80 % of everything I know today [is] a result of the fact that I am one of the few privileged African youth who had access to the internet albeit unstable. The university [I attended] gave us 3GB [of data monthly] and I was able to use that to download PDFs [and watch content on YouTube to learn, although they were low-quality videos because of the minimal [amount] of data. So I was able to learn new skills and access/download materials for my academic courses."

Victor, youth panelist (Nigeria)

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10   ITU, "Global Connectivity Report 2022."

Network reliability, affordability, and regulations limit access

There are still many barriers that get in our way of accessing digital technologies. Our access is constrained by weak and unreliable networks, expensive devices, high-cost services, lack of digital literacy, and insufficient knowledge of English, the dominant language on our devices and on the internet.[11]

Without access to stable and fast internet, working or communicating online can be difficult. Jillo, who lives in Kakuma Refugee Camp in rural Kenya, shared his frustration with slow internet connectivity.

"Although we have access to the internet [...] it is so poor. Sometimes you have [available] data, but in some areas, especially in the remote parts of northwest [Kenya], you can't even access [the internet]. [...] There is only one company that provides [internet in that area] and [connectivity] can be very poor."

Jillo, youth panelist (Kenya)

As the world moved online during the COVID-19 pandemic, affordability of data and devices became an even bigger issue for many youth. Sandra shared her experience when university classes suddenly moved online with inadequate structures in place to support students.

"In the morning [you] have classes online, in the afternoon you have classes online. And while you're at home, you need to help in the house. Sometimes you can be online the whole day, [requiring] data [all day]. Meanwhile, we paid fees [...] to be taught [in the classroom]. I was thinking if classes were moved online, then there should have been some sort of data package, but there was nothing like that. [It] was very frustrating for me because [...] some of [the lecturers] would want you to write and then take pictures [of the assignments] and send it to them. Some of them would want you to type. [...] And I remember, we came back to school to write the exam. We did the classes online and [...] it wasn't effective. [...] We were given just two weeks to prepare and write the exam. I remember that semester, I didn't do well. And it really affected me."

Sandra, youth panelist (Ghana)

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11   Chair and De Lannoy, "Youth, Deprivation and the Internet in Africa."

Affordability was not only an issue for students during the COVID-19 pandemic; it has been a longstanding problem for young people around Africa. A study on young farmers living in rural Uganda found that many could not afford the smartphones that could help them access important information via agricultural platforms (apps or services with farming-related information).[12] In another case, a young teacher from Uganda said at his school they struggled to transition to digital learning because they lacked financial resources.

"We felt the need to digitalize our teaching. We tried to crowdfund for at least 100 tablets, but managed to raise funds for one. The lesson learnt is that for our school to overcome any future mishaps, we need a strategy for inclusive digital tools usage in all primary schools in Uganda."

Young teacher (Uganda)[13]

Many young people with visual disabilities cannot afford assistive devices.

"What enables people with disabilities, especially those with visual impairment, is assistive tools, but they are also very expensive. For example, Apple devices are very assistive and the most expensive too. JAWS is a screen reader which helps people with visual impairment, but it is very expensive and there are many websites which cannot be read by it. In addition to this, it's hard for people with disabilities to get jobs, which reduces their income streams."

Yvonne, youth panelist (Rwanda)

Access to the internet can sometimes be limited by government regulations and shutdowns. This affects our ability to learn, apply for scholarships, or work. For example, when the Uganda government shut down the internet during the election period of 2021, Patience's work as a communications consultant, which is entirely online, was directly impacted.

"Last year, I was running a campaign called 'A Helping Hand' and we were collecting money for shelters. During the campaign, elections were happening. So, they switched off the internet during the elections, yet I was running a campaign online. [...] In African countries, there's always that thing where the government controls the internet. At any one point, they'll switch off all your access to the internet simply because of elections."

Patience, youth panelist (Uganda)

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12   Banga, Njambi-Szlapka, and Phiona, "Youth Enterprise Growth: Evidence from Youth Forward in Uganda."

13   Diepeveen and Phiona, "Youth-Led (Digital) Innovation and Resilience during Covid-19: Experiences from the African Continent."

There are many young people like Patience who fundraise or crowdfund using digital platforms. Through efforts like these we pool money for different causes. We could be raising funds to pay for someone's cancer treatment, a children's library, or school fees. Digital platforms enable the African spirit of Ubuntu (humanity to others) to thrive online.

Access, however, can expose us to harm online

We are not blind to the dangers that access to the internet and other digital technologies exposes us to. Many of us have fallen victim to fraud and scams perpetrated through all kinds of digital technology and platforms, including phone calls, email, websites, and social media apps. Moses, for example, fell victim when a fake Facebook account in his name was used to scam his friends.

"I went to the police. I told them that somebody started a Facebook account in my name and has been reaching out to friends. Friends started showing me evidence of how they had been conned. I told them that I'm extremely sorry. I don't know the person. [As a result of this experience], I feel so insecure every day. [...] I keep changing my Facebook accounts and my other passwords, because I want to be sure that it's secure."

Moses, youth panelist (Uganda)

Viola, who was working at a mobile money agency shortly after completing high school, fell prey to a fraudster too. Someone claiming to be a supervisor from a telecommunications company called and told her she was not properly registered as a mobile money agent. She unwittingly followed the caller's instructions to "register properly" and to send money. Viola only became suspicious when she failed to receive a notification confirming the transaction.

"I called the customer care [line]. They told me they [didn't] know that person, [and I realized that] I lost my boss's money. The boss had to [sack me]."

Viola, youth panelist (Uganda)

Frauds and scams can make us lose trust in each other and become overly suspicious, questioning any information online.

"If you get exposed or affected by some of these online fraudulent activities, then suddenly anything that comes in, you start doubting—is this real? I've seen people [who, when] presented with scholarship opportunities, they would say they don't want to apply because of the bad experience they had with scams. You're telling them this one is actually real. They say, 'No, I'm not interested.' [...] They've had their expectations broken. They've had very bad experiences online and [...] now it is even difficult for them to know which [opportunity] is true or not."

Raphael, youth panelist (Nigeria)

Access to digital technology and platforms can also be counterproductive for young people's social and economic well-being when they engage in activities like unregulated online gambling and borrowing.[14]

Young women face the most harm online

Young women online are inundated with unsolicited messages, bullying, harassment, body shaming, and more. This prevents us from fully enjoying the benefits of being online. Female entrepreneurs face additional challenges when working online, such as sexual harassment, bullying, and inappropriate requests from clients in comments sections or via direct messages.[15]

"You find on Facebook you've posted things to do with agriculture, then someone comes to your DM [direct messaging inbox], instead posting things like nudes there. You are like, it is not even related [and it is] without your consent."

Felicity, young farmer (Kenya)[16]

No wonder some young people, like Sandra, choose to leave social media entirely.

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14   Digital Opportunity Trust, "Speaking out, Reaching out: Country Brief–Kenya."
15   Habitus Insight and Caribou Digital, *Social Agriculture in Kenya: Farmers' Stories of Their Use of Social Media for Agricultural Livelihoods.*
16   Habitus Insight and Caribou Digital, *Social Agriculture in Kenya: Farmers' Stories of Their Use of Social Media for Agricultural Livelihoods.*

"I left Facebook and I don't want to go back, because I posted a picture and then someone came there [posting] some nasty comments and I just decided to go off. [...] I don't want to go on Facebook again because [of] the things that I saw, and the people would just bully you [and post] comments. Even when you post a picture, someone can just come and pass some very mean comments. 'Why do you have a big tummy?' People are just like shaming you, body shaming you. [...] There are some comments that are very depressing."

Sandra, youth panelist (Ghana)

As in the offline world, harmful gender norms play out online, and women always pay the price. Rachel shared her family's reaction to her social media posts advocating for girls' education.

"It went to the extent [that] my uncle started beating me about it. He beat the hell out of me because one of my relatives from the US [saw my posts]. [...] So he came to me and he was like 'What are you doing? I need you to stop that account. Delete it and I don't want you to talk on Facebook again about other people.' And I was like, why? I'm just trying to educate other girls. And [he said], 'Life is not for everyone. Not everyone has to have a good life. If you are lucky enough to reach this part of education, then you are lucky, but you don't need to go and wake up other girls who are obedient in their house.' So I deleted that first account 'cause I didn't want trouble."

Rachel, youth panelist (Kenya)

In Rwanda, Yvonne shared a story about an influencer who has also faced online harassment.

"Here in Rwanda, we have a girl who is an influencer [...] When she posts everything, when she is singing, when she is dancing, when she is saying something, the comment under her post is telling her 'you are a prostitute.'"

Yvonne, youth panelist (Rwanda)

Young men recognize and acknowledge that they see this happening too.

"On social media, a man will make a certain comment and it is taken lightly. If the same comment is made by a lady, all hell is open for her. It's a very unfair ground, social media [...] when it comes to gender and females are really finding it hard to survive there. They have to be very careful with what they say."

Thomas (Kenya)[17]

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17   Habitus Insight and Caribou Digital, *Social Agriculture in Kenya: Farmers' Stories of Their Use of Social Media for Agricultural Livelihoods*.

Mihret has experienced this unfairness.

"As a woman, people don't accept you when you are speaking about politics, election, infrastructure. People will call you out by saying that you don't know anything about this. You don't know anything about that. I posted saying that I have two degrees. [...] People assume by looking at my pictures that I don't have any clue about how the world is functioning. [...] So those kinds of things, especially for women, social media makes us seen as objects. For example, if both [a] female and male post a picture or share their daily activities, people will assume that the girl is doing that as a tramp or to get attention from others or to flirt with other dudes. But if the guy's doing that, they will assume that he's empowering himself or he's being bold enough."

Mihret, youth panelist (Ethiopia)

This has consequences on young women's mental well-being as they anticipate the harassment even before it happens.

"[Perhaps] no one is necessarily harassing you, but you anticipate it, like you're cautious about what you post because you know that a certain statement or a certain picture could trigger an attack. It's psychological almost torture of having to be cautious of and be mindful of this thing that hasn't yet happened but could very well happen because we see it every day happening to other people."

Faith, youth panelist (Kenya)

Access and the gender digital divide

The first stage in the mobile internet user journey is mobile phone ownership. But across sub-Saharan Africa, women are less likely than men to own one, as the 2023 GSMA *Mobile Gender Report* shows.[18]

In surveys by GSMA, some women said they could not afford a mobile phone or lacked the literacy and digital skills to use one. Others said they didn't own a mobile phone because they were concerned about their physical safety. In Nigeria, some women said they could not acquire a phone because they lacked family approval.

While the data is not disaggregated by age, our shared experiences show that young women face similar challenges. A survey in Kenya, Ghana, Uganda, Ethiopia, and Rwanda found that many young women were significantly less likely than young men to own internet-enabled devices and optimize digital tools to improve their businesses or enhance their job prospects during the COVID-19 pandemic.[19] Many young women also reported that they were not familiar with using various digital tools for work and business and were more accustomed to using devices for social purposes.

18   Jeffrie et al., *The Mobile Gender Gap Report 2023*.
19   Digital Opportunity Trust, "Speaking Out, Reaching Out: African Youth and the Pandemic, Gender Report 2022."

Action steps to improve digital access

During our meetings as a panel, we discussed ideas to improve digital access for ourselves and fellow youth in Africa. Youth are digitally savvy. We know the power of social networking. We need organizations to support us to leverage the power of digital technology to enable us to connect, expand our networks, discover new opportunities, and access new resources and skills-building opportunities. These action steps serve as a starting point for governments and development partners working to increase access for youth in Africa.

Affordability   ACCESS

As a percentage of average monthly income, the cost of 1GB of data is much higher for young people in Africa than those in Asia and the Americas.[20] Governments and authorities should address the affordability of data packages and devices by reducing taxes on data or subsidizing the cost of devices for students. For example, local social enterprises, started and run by young entrepreneurs, should be provided with affordable devices on installment payment plans.[21] Additionally, network service providers could offer affordable internet services for students to facilitate online learning.

Connectivity   ACCESS

Youth who live in rural areas or want to move out of crowded cities need "meaningful internet connectivity" (at least 4G connection).[22] Governments and the telecommunication industry can partner to support the expansion and enhancement of network infrastructure, particularly in rural areas.

Countering online harassment   ACCESS

Online harassment, especially of young women, is a societal problem requiring a full community response to enable us to feel safe to learn, work, and lead online. African governments should hold social media companies accountable for online safety. They should push them to improve their algorithms to minimize the visibility of hate speech and to establish clear guidelines that prohibit hate speech, bullying, and harassment. In addition, governments and non-state actors should conduct public awareness campaigns to promote respectful communication online.

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20   Rodriguez and Woodhouse, "Mobile Data Cost Have Increased, Making Internet Connectivity Unaffordable for Many."
21   Diepeveen and Phiona, "Youth-Led (Digital) Innovation and Resilience during Covid-19: Experiences from the African Continent."
22   Jorge and Thakur, "Raising the Bar for Internet Access."

Electricity

ACCESS

For all our devices and digital platforms, we need electricity. Governments should expand and enhance electricity grids to enable connection to the internet and use of digital technology wherever we are. This could be done through renewable energy sources (like the world's largest solar power plant in Morocco[23]) or the repair and enhancement of existing power generation and transmission plants.

Security

ACCESS

We want to feel safe online. Governments and non-state actors should prioritize digital security by, for example, partnering with internet service providers and international technology companies to develop additional security layers to prevent cybercrime. In addition, governments should enhance data protection, incorporate cybersecurity into school curricula, and monitor cybercrime more closely.

Sharing with our peers

ACCESS

Nearly a half of young people in Africa do not have that access to the internet, digital devices, or skills and knowledge.[24] Those of us who do have the responsibility to share our knowledge and skills with others in our schools and communities.

23   Alami, "How Morocco Went Big on Solar Energy."
24   ITU, "Individuals Using the Internet."

Skills for a digital age

"The only way to build tomorrow is to train the kids today."

My name is Akinnibosun Victor Abayomi. I live in Abuja, Nigeria. I am an information system analyst at the National Open University of Nigeria. I am also the founder of TekSpunk Hub, an initiative born out of a passion for equipping teenagers and marginalized young adults with technology skills for the future of work in Africa.

Technology is what has enabled me to come all the way from my village to live in Abuja and work with the largest (most decentralized) university in West Africa. I grew up in Alade-Idanre, in Ondo State, Nigeria, a remote community where most people, including my parents, were farmers. There, education was a luxury, far from a priority. In fact, I am one of the few people who had access to education in the neighboring village through a scholarship. I saw a computer system for the first time when I was in my second-to-last year of high school. During my last year in school, a teacher noticed my fascination with computers and suggested that I study computer science or computer engineering. This is how I started acquiring ICT skills.

At university, they taught me what I should know, but not how to get to know it. I realized that I needed resources beyond the academic curriculum of the university and my geographical domain. I needed to learn programming. Thanks to YouTube, Udemy, and Coursera, the online learning platforms that were evolving at that time, I learned programming. Currently, I'm learning cybersecurity. As a result of these resources, I now have skills in web development, web designing, data science/analytics, machine learning, IT project management, and cybersecurity.

I am passionate about giving younger generations the privileges I never had by enabling them to acquire technological skills that will prepare them for work in the digital era. Every Saturday, for two hours, I gather children (from age 6 to 16) in Abuja and teach them programming with Python and Scratch. I hope to go back to my village to share my skills with the youth there as well.

This section looks at how basic skills, such as knowing how to use a computer or smartphone, or to connect to the internet, are important for young people as we transition from school to work. We provide ideas for policymakers and organizations on how they can ensure more of us acquire the right skills for the digital age. Imagine the potential that could be unleashed if more young people had skills like mine and those of my fellow panelists.

Akinnibosun Victor Abayomi
Youth panelist (Nigeria)

Figure 3 ▾

Digital skills

Digital skills

Adv-anced — Ability to perform specialist tasks in ICT professions

Intermediate — Ability to use technology to perform work-related tasks

Basic — Ability to access and use digital technologies to perform basic tasks
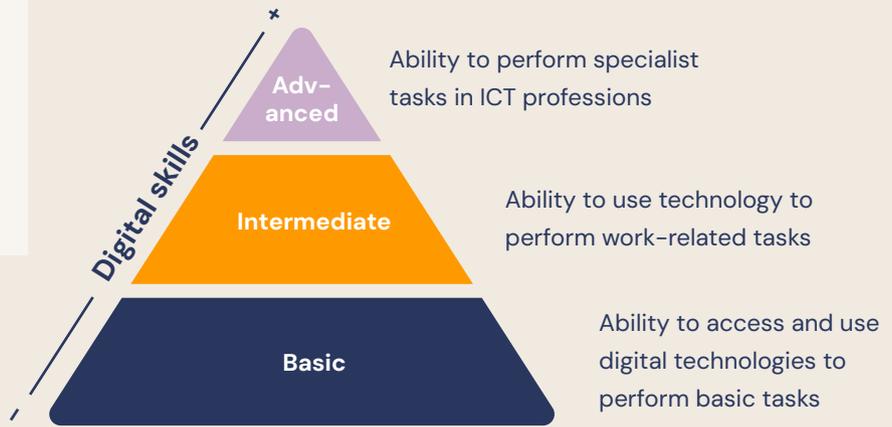
Demand for digital skills globally currently exceeds supply, with a significant gap for intermediate and advanced digital skills in sub-Saharan Africa.

🟧 **Supply = demand**   ⬛ **Sub-Saharan Africa demand gap**   ⬜ **Global markets demand gap**

Basic skills
Intermediate skills
Advanced skills
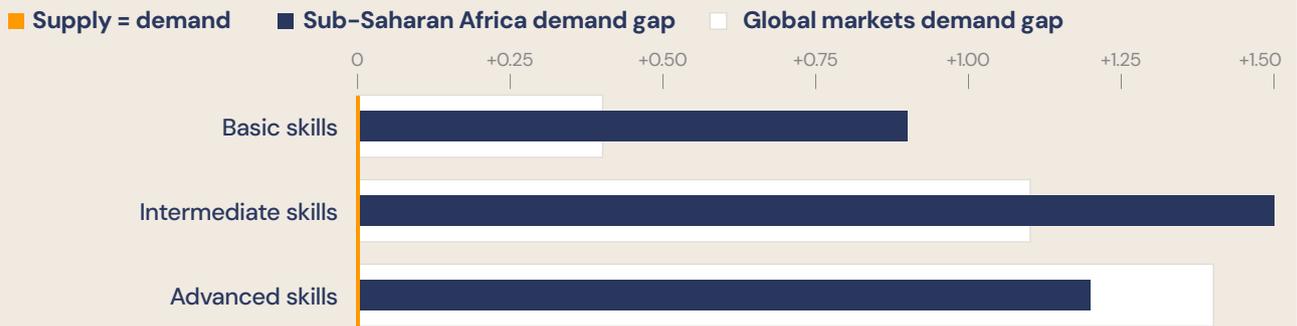
200 million+
jobs in sub-Saharan Africa will require digital skills by 2030.

86% of individuals are using the internet worldwide, yet the median percentage of individuals reporting digital skills demonstrates that many are using the internet unaware of its benefits and harms.

🟪 **Individuals using the internet (86%)**   🟧 **Median percentage of individuals reporting digital skills**

Communication/collaboration — 50%
Problem solving — 38%
Safety — 34%
Content creation — 30%
Information/data literacy — 28%
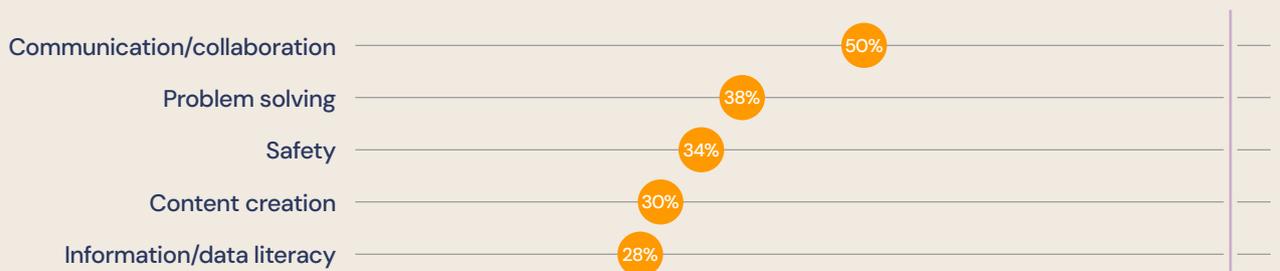
What skills in a digital age mean to us

We agree with the World Bank's statement that a digitally competent workforce and digitally literate Africans are key to unlocking the benefits promised by digital technologies.[25] As young people, we know and understand this. For us, skills in a digital age generally fall into two categories:

Basic digital skills: These are skills needed every day to perform basic tasks, such as using a phone to send a message, send an email, or make mobile money transactions.

Advanced digital skills: These are skills acquired through specialized training that enable young people to take on professional work, such as programming, data analysis, machine learning, artificial intelligence, or coding.

Skills around assistive technology for those of us with visual or hearing impairments fall into both categories. Some assistive technologies help perform basic tasks like messaging and emailing, while others (like JAWS) require specialized training to properly understand and use.

Both basic and advanced skills are key for learning in school, working, and participating in community activities. Without these critical skills, we would feel disconnected. Whether you are a young student, worker, software developer, entrepreneur, stay-at-home parent, or refugee living in urban or rural areas, having the skills to navigate various digital technologies is the key to more opportunities and possibilities in life.

25   Jeffrie et al., Mobile Gender Gap Report 2023.

Employment and skills for a digital age

"Africa's most precious asset, the youth who constitute 60% of the overall population, can be remodeled, harnessed, empowered and transformed into a digitally adaptive, skilled and innovative workforce that not only comprehend, adopt and move with global trends but chart its own digital pathways towards inclusive growth and development."

African Union, The Digital Transformation Strategy For Africa (2020-2030)

Digital technologies are transforming Africa and unlocking new pathways for rapid economic growth, innovation, job creation, and access to services, that would have been unimaginable only a decade ago. More than ever, Africa's youth need digital skills that are essential to thriving in this digitized global economy.[26]

Many young people still lack sufficient job-relevant digital skills to fill vacancies, yet job seekers with digital skills generally have greater success in finding employment.[27] Basic digital skills like using a phone, searching online, communicating via email or instant messaging, using mobile money, and others are vital for success in today's job market. The importance of digital skills is limited to formal employment; in the informal sector, many entrepreneurs need the skills to send and receive mobile money or use WhatsApp to communicate with customers. On the other hand, having advanced digital skills such as coding, programming, data analysis, blockchain, machine learning, artificial intelligence, robotics, and engineering can open up more job opportunities for young people to work in the growing ICT-related industries.

During the COVID-19 pandemic, the ILO found that ICT-related industries saw the strongest growth in employment at a time when many people were losing their jobs in non-ICT sectors. The ILO predicts that demand for digitally skilled workers will continue to grow given the number of new digital tools, solutions, platforms, and services that have emerged post-pandemic. The areas, sectors, and occupations where digitalization stimulates job creation will inevitably require increasingly advanced digital skills, knowledge, and capabilities.[28]

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26   World Bank, "Digital Economy for Africa Initiative."
27   ITU, "Skills Development for the Digital Economy."
28   ITU, "Skills Development for the Digital Economy."

Foundational digital skills are a necessity

Foundational digital skills learned through peers, community leaders, school, or self-taught through the internet, give us the motivation, confidence, and ability to engage with a variety of other digital technologies. Rebecca's experience during the COVID-19 pandemic illustrates how foundational digital skills enable us to easily adopt other digital tools needed for work.

"When Zoom came on board during COVID, people were using it to meet virtually, and it looked like it was flexible for them. But then you had to have internet; you had to have a phone or a laptop to be able to access it and to learn how to use it to suit your needs. So, we had to learn how to use Zoom effectively [on smartphones for] all those webinar calls. And you had to figure out those smartphones [and] laptops, because most of the times we did not have the IT people around, because unlike before where you would go to the office and the IT person was seated in front of you, [this time] it was you in your house figuring out something."

Rebecca, youth panelist (Uganda)

For youth with disabilities, digital skills are critical, yet costly

Having foundational digital skills helps those of us with disabilities easily learn and adopt accessibility tools we need to connect, work, study, and eventually gain individual autonomy and independence.

"It's really hard to understand how people with visual impairments can use a phone [or] a machine, but technology is a very good thing because I can use a machine, phone, and other devices independently. I don't ask […] people to help me to check my messages where I have technology. We have a talking program on our [computers] called JAWS, and on our phones [a] program called VoiceOver, which help us to know what is on the screen, to read messaging independently, [and] to do our daily job independently, without asking […] other people to help us."

Yvonne, youth panelist (Rwanda)

Yet the cost of acquiring the skills and knowledge to successfully use accessibility tools can be high. Accessibility software programs are often not taught in schools, and there are few people who are qualified to teach these programs. Papi, who has a vision impairment, shared the challenges he's faced in learning how to use accessibility tools, like JAWS and VoiceOver. Papi was pursuing a bachelor's degree in business administration when he lost his sight. At the time, he thought he would never be able to use a computer again.

"I was advised to go to a rehabilitation center for the blind, and [...] they taught me how to use braille only. No one there was using a computer. [...] A friend told me to go to [a certain] university to see if they could [teach me JAWS in their computer lab]."

Papi, youth panelist (Rwanda)

Unfortunately, Papi was not a student at this public university and could not use their computers for free. He talked to an employee there who agreed to teach Papi JAWS for US$2–3 dollars per hour. The employee gave Papi handouts in braille with the introductory JAWS courses.

"It was hard for me to get that money because it was far from my home. [...] It was very expensive to go to that university and learn [JAWS] for like four hours per day. And I had no money at that time to cover that. Then I bought a secondhand Toshiba laptop, and [...] that's where I started to get used to [...] JAWS."

Papi, youth panelist (Rwanda)

After finishing his university studies, Papi underwent treatment to fix his sight in India. While the treatment was not successful, he was connected with another rehabilitation center for the blind in Gujarat, India, where he took an advanced course in JAWS. When he returned to Rwanda, Papi was determined to share his knowledge of JAWS and other accessibility tools with youth living with visual impairment. So far, he has trained 27 young people, some of whom had never worked with a computer or smartphone before.

While Papi's is an inspiring story of overcoming challenges, it also shows the barriers for young people wishing to learn how to assistive technologies in an environment lacking the required systems.

We pass on what we've learned to our communities

We know how important digital skills are, which is why we make a point of passing on what we've learned to our communities. We share our knowledge with the next generation, our peers, and elders, both online and offline. We hope that this will make it easier and cheaper for others to acquire digital skills.

Jillo provides digital literacy training to fellow young men and women in Kakuma Refugee Camp in Kenya. A community member trained him and his friends for one hour a day for three months. Now, he is "paying it forward."

"We came up with [the idea for a] small center: one room [with] a small solar [generator] for power. Then we started training [other youth at the refugee camp]. At that time, we didn't even have internet [access]. After one or two months, we realized people need these [services]. [...] So [we asked the students to] pay a small fee per month [500 Kenya shillings] to provide [training], power, and [access to] the internet. So that is how we started the center, which became one of the biggest centers within the [Kakuma refugee] camp. [...] We have a fully fledged center of ICT training and host online students who are learning [at] universities."

Jillo, youth panelist (Kenya)

In Nigeria, Binta used various online platforms to teach herself skills that she now passes on to fellow young women.

"I came mostly from an HR and entrepreneurship background and ventured into the field of tech just after COVID-19. I'm still learning UI/UX design on Coursera. I'm running something like an NGO. I'm trying to get more women into the tech space so I'm just running this platform where I get women to come and learn about data analytics and UX design and get them access to free courses online. They have an environment where they can learn and ask questions. Many of them don't know that these resources [are] available. So I act as a bridge to help them access these courses and have a space where they can come and access the internet and electricity, and, if they have questions, I can guide them through. I don't teach, I just guide them."

Binta, freelancer (Nigeria)[29]

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29   Lagos Business School and Caribou Digital, unpublished interview transcript on women and platforms in Nigeria.

Even though the COVID-19 period was a tough time for all of us, we did not let the pandemic slow us down. We continued to honor our commitment to train others. Some of us were involved in training fellow young women to use technology innovatively in their businesses, such as creating Facebook pages to share information on agribusiness.[30]

For example, Adwoa is the founder and CEO of Women's Haven Africa (WHA), a tech and innovation hub focused on increasing the participation of women in the Ashanti region of Ghana in entrepreneurship, leadership, and technology. WHA is a thriving social enterprise that had trained more than 100 women in entrepreneurship and technology prior to the COVID-19 pandemic. When the government ordered strict lockdowns in Ghana, WHA had to adapt to the new reality and shifted all its programs online. This adaptation has proven successful, with WHA training more than 200 young women in coding, data analytics, leadership, and enterprise start-up through Google Meet and Zoom.[31]

Digital skills are a pathway to more skills

We use digital skills to learn and gain knowledge beyond the classroom, at our own pace and in our own time. Online learning tools help us to acquire other relevant skills that enable progression in life, at work, or in school. For example, Faith is pursuing a degree in software development and uses online learning tools, like Udemy, as additional learning resource.

"When I think of all the technologies I've used, Udemy has [had] the biggest impact in my life so far. [...] I've taken classes on programming with Python [and] full-stack web development. And it really helped with my classes, 'cause in school I'm studying computer science, so we're always programming. And sometimes, it was very hard for me to keep up, just relying on what we're learning in school. So having this self-paced environment where I could learn, go back to concepts that I didn't understand, and do it over and over again until they became clear, has really been very helpful."

Faith, youth panelist (Kenya)

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30   Diepeveen and Phiona, "Youth-Led (Digital) Innovation and Resilience during Covid–19: Experiences from the African Continent."

31   Digital Opportunity Trust, "Speaking Out, Reaching Out: African Youth and the Pandemic, Gender Report 2022."

After acquiring a degree in chemical engineering, Nafisa used YouTube to turn her fascination with 3D drawing into something more.

"[I] studied chemical engineering. [After] finishing school, I still had the passion for learning [3D drawing]. I took my time. I went on YouTube gradually. I got the software. I started learning. And so far, I can say I'm almost a pro, not yet a pro, but I'm getting there. [...] Anytime I want to learn something new, like baking, makeup, anything, I always go online. I search and I learn."

Nafisa, youth panelist (Nigeria)

In Kenya, Rachel learned to crochet through YouTube and started a small business online. While it hasn't brought in as much income as she had hoped, it gave her a sense of purpose during the COVID-19 pandemic.

"As a refugee in Kenya, I couldn't apply for any job because we need to have [a work] permit and getting it [is] complicated. I saw some of my cousins [...] crocheting [...] and they told me that they sell a set at around US$70. I told them to teach me, [but] when someone is busy doing their things, they don't pay attention to what you're doing wrong and what you are doing right, especially when you're not paying them. They taught me how to hold the crocheting needles, but then I didn't get the idea well. So I found a way to teach myself how to do it, 'cause I was really serious about it. [...] I decided to go to YouTube, and I would just watch the videos and started doing my own thing."

Rachel, youth panelist (Kenya)

But the pressure to keep learning can be overwhelming

As our thirst for knowledge continues to expand, we occasionally feel pressured to keep learning, fearing being left behind. For Faith, this constant need to learn and upskill can come with pressures:

"I think on LinkedIn, like literally every day, someone's sharing a certification they've completed. Someone is sharing that they're celebrating the start of a new job. [...] If I check LinkedIn in the morning, there'd be like ten people on my feed who had completed a certification and started a new job or a new role or something like that. And two hours later, there are still more people who've done the same. Sometimes when you go on LinkedIn, [I feel like] I might not [be] doing enough. Like, do you people sleep? Do you do anything else other than pursuing your career goals? [...] It [can] get [to] your head. It can feel very competitive. So, it's just like, okay, tomorrow, I'm also going to start a new certification and I'll finish it in a week. So, I also have something to share."

Faith, youth panelist (Kenya)

Yet, we persist because we know there is value in learning more. Online communities of people who are on the same learning journey help us stay up to date with the current trends in technology.

"I'm in some design communities and some developer communities. This way you can stay [up to date with the] latest trends, because [...] you can learn from other people and other people are learning from other people. I like [these] communities a lot, 'cause you can learn a lot from communities, boot camps, or hangouts than you can actually research on [your own]."

Anastestia, youth panelist (Nigeria)

Women still lag behind in digital skills

For every 100 male young people who have digital skills, only 65 female young people do, a 2023 UNICEF report of 32 countries found.[32]

The gender gap in digital skills has various implications. It affects women's ability to access information, educational resources, and employment opportunities available online. It also hampers their participation in the digital economy, entrepreneurship, and decision-making processes related to technology.

According to UNICEF, young adults in low- and middle-income countries need to master digital skills, starting from the most basic ones, such as copying a file or adding an attachment to an email, to more complex skills, such as performing calculations in a spreadsheet or preparing electronic presentations, to better prepare them for the increasingly digital world of work.[33]

See the following sections for our recommendations on how to close the gender digital skills gap.

32   UNICEF, "Bridging the Gender Digital Divide: Challenges and an Urgent Call for Action for Equitable Digital Skills Development."
33   UNICEF, "Bridging the Gender Digital Divide: Challenges and an Urgent Call for Action for Equitable Digital Skills Development."

Action steps to help youth acquire digital skills

During our meetings as a panel, we discussed ideas on how to help our fellow youth acquire both basic and advanced digital skills. These action steps serve as a starting point for governments and development partners working to support digital skills for youth in Africa.

School curricula   **S** KILLS

Incorporate digital literacy into school curricula from early childhood, so generations are set up for success in this digital age. Governments should partner with international technology companies to support training initiatives like tech hubs, e-libraries, or skill development centers for youth, particularly in rural areas and in low-income areas in cities.

Knowledge sharing   **S K** ILLS

We have the responsibility to share what we've learned with our peers and younger generations. Support peer-to-peer learning efforts, like Jillo's example of developing the ICT center in Kakuma Refugee Camp and Rwanda's digital ambassador program that Papi mentioned.[34]

Include young girls   **S K I** LLS

All of us, including young women and girls, have a right to learn how to use digital technologies. UNICEF provided some specific recommendations to ensure young girls are not left behind. These include ensuring equitable access to the internet in schools, community youth centers, and at home to promote digital inclusion, including the provision of low-cost devices to marginalized communities. UNICEF recommends context-specific analyses of barriers to girls' skills acquisition in school and the consideration of girl-targeted after-school IT clubs or other modalities that address their exclusion. It also proposes support for adolescent girls and young women to develop digital skills outside of school, including offering digital skills training in safe spaces and community centers catering to girls and young women. Another recommendation is promotion of positive gender socialization around girls' digital inclusion within families and investment in evidence-based action to address the harmful gender norms that continue to underpin the barriers to digital access, internet usage, and skills acquisition faced by adolescent girls and young women.[35]

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34   Rwandan Ministry of ICT and Innovation, "MINICT: Digital Ambassadors Programme."
35   UNICEF, "Bridging the Gender Digital Divide: Challenges and an Urgent Call for Action for Equitable Digital Skills Development."

Lifelong learning   SKILLS

Digital technologies are always evolving, and keeping up with the latest trends can be exhausting. We encourage our peers to identify and acquire specific digital skills (basic or advanced) that are in demand and align with their interests and future careers. This is a marathon, not a sprint.

Learning hands-on   SKILLS

While acquiring knowledge online, by watching videos or reading articles and blog posts, is one way to learn digital skills, hands-on learning is vital. Governments, development agencies, and nongovernmental organizations should partner with private sector actors and local startups to organize hackathons, coding competitions, internships, or apprenticeship programs. Opportunities like these help build our confidence in using advanced digital skills and enrich our portfolios for use in search of employment or further education, while providing a conducive environment for networking with peers and potential employers.

Skilled trainers   SKILLS

Learning starts from someone, often a teacher or community leader. It is important that training or school programs teaching digital skills are led by well-qualified trainers. Community members, particularly in rural areas, should be taught how to maintain the ICT tools in their custody.

Voice

Akintobi Ayomide Ezekiel
Youth panelist (Nigeria)

"The world has neglected our voices for too long."

I am Akintobi Ayomide Ezekiel, a student of political science at the University of Ibadan in Oyo State, Nigeria. I'm passionate about utilizing the internet to project my voice, to a point where it's personal. As a person with albinism, digital technology enables me to make known my views on the one issue that means the most to me. I have used the internet to connect with people across the world on the need to deconstruct myths about people with albinism.

For example, on the 2020 International Albinism Awareness Day, I published an article titled "The Existentialism of Albinos and Albinoids." The article tells my story growing up as an albino in Africa and gives insights into the stigmatization that people with albinism in Africa face. The article would not have been read so widely were it not for the various digital technology platforms that allowed it to thrive, like Facebook, WhatsApp, and a blog.

I believe one of the most powerful rights we have is to be able to say our opinions without the fear of subjugation or repression. There have been and there still are cases of countries depriving their citizens of the right to air their views and make their opinions known, especially on political matters that affect their lives. In this section, young people across Africa share their experiences on making themselves heard in the digital age. In reading this section, I hope you will see the many ways in which we, as youth in Africa, are using digital technologies to share our voices and opinions. The world has neglected our voices for too long, and the time for change has come.

Figure 4 ▾

Digital voice

Source: Access Now, "The Return of Digital Authoritarianism: Internet Shutdowns in 2021"; Surfshark, "Social Media Censorship Cases Decreased by 35% in 2021"; UNICEF, "UNICEF Poll: More than a Third of Young People in 30 Countries Report Being a Victim of Online Bullying"; CIPESA, "In Search of Safe Spaces Online: A Research Summary"; Seward, "A Safer Digital Public Sphere: Addressing Online Gender-Based Violence."
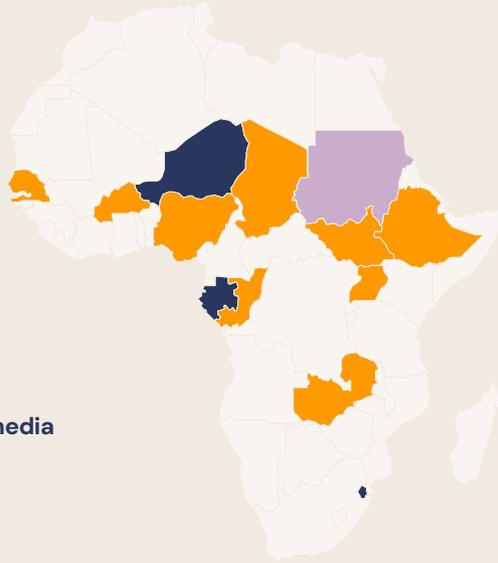
■ **Shut down internet and social media**
■ **Censored social media**
■ **Shut down internet**

In 2021, 13 African countries either shut down the internet or censored social media and communication apps.

1 in 3

young people around the globe have said they've been a victim of online bullying.

6 out of 10

women, transgender, non binary, and non-heterosexual individuals have experienced online coercion and harassment, sexual harms, and harms to identity, reputation, privacy, and security.

TYPES OF AGGRESSION FOUND ONLINE

Trolling	Hate speech	Mansplaining due to feminist advocacy	Catfishing	Unsolicited sexual images and messages	Body shaming
Online stalking	Derogatory remarks on social media	Blackmail/ extortion	Revenge pornography	Lack of ownership	Tracking of activity by family member

What voice in a digital age means to us

Across Africa, youth represent the fastest-growing group of adopters of social media platforms like Facebook, TikTok, WhatsApp, YouTube, LinkedIn, and Twitter. We use these tools to connect, organize, influence, play, share, find inspiration, and create. Through online convening tools like Zoom and Google Meet, we can be part of national and global conversations on issues we care about, such as women's rights, the rights of persons with disabilities, education, governance, religion, and work. The COVID-19 pandemic shut down physical borders and restricted people's movements, but the use of convening tools enabled us to participate in conversations from which we may have been excluded pre-pandemic. Additionally, we increasingly turn to social media to not only speak out on issues of politics and governance but to join social movements in solidarity with people in different parts of the world.

For us, having a voice in a digital age is a combination of various aspects:

Visibility and validation: We are seen and recognized as people who have accomplished something, have something to say, and are creative or knowledgeable about a given topic.

Identity: Having a profile or account on social media gives young people a sense of identity.

Participation: Having a voice is about civic participation, activism, and participation in online conversation. Social media platforms also provide a space where we feel free to share our views on various issues, including fashion, sports, and entertainment.

Belonging: Voice and community are intertwined. We create, join, and build communities as we share and exchange ideas online.

Connecting to networks and communities is vital

Digital technologies allow us to connect with people at home and all over the world. For example, we can connect with family in other countries and peers who share similar life experiences or professional interests, no matter their location.

"[A female ICT influencer has] been an inspiration for [many] Ghanaian women. She's a program manager at Microsoft, but even though she's up there, she always gets in touch with the people down here. I remember one time I retweeted her Twitter post, and she immediately reached out to me. She wanted to find out what my inspirations are [and] what brought me into the software development field. And I told her everything. And she even gave me links to places I can apply to get extra remote jobs. [...] Recently I saw something she did, giving out laptops to people so that they can also learn and build their digital skills because that's where we are moving towards. And she has inspired me a lot. I also want to see myself one day working at Microsoft. So that's the main reason I [...] follow her."

Jemima, youth panelist (Ghana)

Patience, a communications consultant, shared how Twitter (now X) has connected her to people all around the world.

"I would say social media platforms help you engage with people outside your community, outside your society. Especially Twitter. [...] But still Facebook is limited to only that crowd that you usually engage with, a crowd that you let into your space. [...] When it comes to Twitter, someone can retweet something and you find yourself engaging with South Africans in America and Australia outside your circles. Which is a very good thing because then you get to learn from their experiences. You get to learn from the mistakes they've [made] and they also share your experiences and learn from you."

Patience, youth panelist (Uganda)

Rebecca has not only made connections through social media but also facilitated the same for other young women.

"I have been able to start a mentorship space for young women and connect them to their mentors. One young woman shared this testimonial: 'Thanks Becky. By listening to the young space, I have made my leadership better.'"

Rebecca, youth panelist (Uganda)

Social media brings us together with our family, friends, and community, yet it can also increase our feelings of disconnection. Sharon, an interior designer and Airbnb host, believes inauthenticity is an obstacle to meaningful online connection.

"The biggest obstacle [to] meaningful online connection I [have] found is personal branding. You know, authenticity doesn't have to mean complete transparency, but it does mean acknowledging what you really think and feel. Very rarely does a person think and feel only things that align with a polished online persona. [...] No one has all the answers on any topic. No one is always happy and positive. I'm not suggesting we should complain excessively or be insensitive or rude online. I'm merely suggesting that we recognize when we are writing or portraying something that isn't true to our actual experience, and then challenge that instinct. This can be a little tricky because the reality is that personal branding is important [...] but it's possible to brand yourself while maintaining authenticity.

Sharon, youth panelist (Kenya)

Being online comes with disadvantages too. Like many young people around the world, we face online bullying, intimidation, and gender-based violence. This affects our confidence and negatively impacts our well-being. Peer pressure is real on social media too. For example, when we see our friends "living their best life," we might come away feeling like we are not doing enough. Sometimes we're hesitant to post happy moments for fear of being judged by our friends or information about our social media posts reaching our families and elders. It is because of these reasons that Raphael, who lives abroad, is careful with what he posts online.

"You're in the moment where you see [an] opportunity for you to maybe have fun and be happy and share those moments, but you don't want to share them. Because one, it's going to send a wrong image; two, people are going to come back and ask [for money] from you because they would have the impression that you're now in a much better place. And then three, if you refuse, [...] the person will keep saying, 'You've changed a lot. This was not like you before, when you were back home.' [...] Those words can really make you feel like a bad person. So, at some moment I stopped. I would not post anything. Even if I wanted to post, I would make sure [I posted only] those pictures that no one would assume anything [about]."

Raphael, youth panelist (Nigeria)

Voice is an important aspect of independence and confidence

Digital technologies affect the way we choose to use—or not to use—our voices in many areas of our lives, including our jobs, families, activism, and more. This is played out on social media, where we learn from our peers around the world. Yvonne shared how social media expanded her ideas and expectations around the role of girls and women in society.

"Before [starting to use] social media or having access to digital technology, I really didn't know the role or the value of girls or women in society. But when I started using digital platforms, like social media [...] I started to see the strong women in our world, the strongest women here in Rwanda, what they do [and] what they think about the development of the countries. Like here in Rwanda, in our culture, we used to know that the women or the girls are there to stay home and take care [of the] babies and take care of the house and take care of their man. There is no other job they can do. We have many proverbs which say that without [cleaning], without cooking, there's not any other role of women and the girls. So, when I started to learn about other countries' cultures, I started to see that in the past there was a big journey, but now there are some steps which have been made by the women to develop, to show the whole world that they're [capable]. So, the choice I made by seeing all those possibilities for girls and women is to be a big voice of the girls, of the women. [...] I chose to be a journalist [to talk about the possibilities, thoughts, and problems of women and girls]."

Yvonne, youth panelist (Rwanda)

During the COVID-19 pandemic, WhatsApp groups in particular were used to spread news, both real and fake, and keep us up to date on the current situation.[36] Victor and Erica share both sides of how social media impacts youth voices in elections.

"Currently, Nigeria is in the phase of choosing another leader in politics. [...] The trends on different social media platforms have a way of aiding your choice on who to support and/or vote for, even if you're politically illiterate. One can also acquire knowledge and engage with other people in the same regard."

Victor, youth panelist (Nigeria)

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36   Pinet, Phiona, and Youn, "Advancing Youth-Centred Digital Ecosystems in Africa in a Post-Covid-19 World."

"I think there's a challenge of having too much information. Sometimes we are now exposed to fake news and information, and we don't know which one is true and which one is not. So that can sometimes confuse or derail the choice because the sources of information that we are getting might not be the right sources. So, there is no such thing as too much choice, but there is such a thing as too much information."

Erica, youth panelist (Rwanda)

This confusion that Erica mentions can lead to serious mental health crises amongst our peers. To balance these competing forces, we want to learn how to respectfully share our voices online in a way that doesn't harm others or ourselves.

"It's understandable to feel overwhelmed, and sometimes even frustrated with technology. You wonder, 'Okay, what's going on?' [...] So as far as [...] time on the internet, I tend to believe that these things can sometimes be very toxic for human [brain] consumption."

Sharon, youth panelist (Kenya)

"I wish I could have a better voice online so that I could use it positively. I don't wish [that] only for myself, but I wish for [all] users to have that platform, that chance so that we can advocate for peace, we can advocate for equality, we can advocate for democracy."

Mihret, youth panelist (Ethiopia)

Women's voice and participation online in sub–Saharan Africa

More women face forms of online violence than men, resulting in poor engagement and participation online. Recent research on online gender–based violence in Ethiopia, Kenya, Uganda, Senegal, and South Africa showed that most incidents occurred on Facebook. In Kenya, Uganda, Senegal, and South Africa, online gender–based violence happens primarily on Facebook and WhatsApp.[37]

The absence of laws designed to specifically address the various forms of digital violence (such as non consensual sharing of intimate images, trolling, bullying, and harassment) and the lack of sufficient in–country reporting mechanisms exacerbate these challenges, often resulting in many women being forced to go offline or resorting to self–censorship. Limited awareness of platform-specific responses to addressing online gender-based violence only serves to further the perception of hopelessness in the face of online assaults.[38]

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37   World Wide Web Foundation, "OGBV in the Global South."
38   World Wide Web Foundation, "OGBV in the Global South."

Action steps to amplify youth voices

During our meetings as a panel, we discussed ideas to amplify our and fellow youths' voices online, which governments, development partners, nongovernmental organizations, and private sector actors should consider.

Virtual spaces by us, for us   V O I C E

Amazing startups and ideas are coming out of Africa. Support virtual spaces, communities, and conversations created by African youth for African youth. These virtual spaces provide opportunities for us to share our voices and support each other with our personal, educational, and professional choices.

Organize for laws against online violence   V O I C E

At the start of the internet, it seemed everyone was equal; but we now know that offline social norms play out online too. Our laws need to catch up to hold people accountable for digital violence, including non consensual sharing of intimate images, trolling, bullying, and harassment. We need to organize, teach our peers, and demand better from our leaders.

Identify offensive speech and disinformation   V O I C E

Disinformation and offensive speech have a negative impact on us and our communities, but not all of us can identify false information when we see it. We acknowledge that some of us might not be using the internet and social media responsibly. Provide social media training for youth, particularly on how to limit offensive speech and recognize disinformation.

Creative responses in crisis   V O I C E

Engage with us as creative leaders in crisis responses, rather than shutting down social media platforms or the internet. Use our creativity "as part of solutions to build inclusive and sustainable community resilience, both in digital and local spaces."[39]

Encourage mental well-being   V O I C E

We're only just starting to understand the harms of digital technologies on young people's brains, and we need our elders to help us. Advocate for young people's mental health when using social media platforms and support mental and emotional well-being online via specific strategies, such as taking breaks from social media.

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39   Diepeveen and Phiona, "Youth-Led (Digital) Innovation and Resilience during Covid-19: Experiences from the African Continent."

Jobs and livelihoods in a digital age

> "This career path was very exciting because it gave me a choice."

My name is Anastestia Onyinyechukwu Onyekaba. I am a user interface (UI)/user experience (UX) freelance designer and front-end developer. I design interfaces for mobile, websites, and apps. I use Upwork, a global freelancing platform, to find work opportunities. I started doing this at the beginning of the COVID-19 pandemic and it is my source of income. This is not what I initially planned to do with my life, but we live in a world where it's difficult to know the destination of one's journey.

I graduated from university with a degree in chemical engineering during the COVID-19 pandemic, but I couldn't get a job. Some of my friends who were tech savvy were already making money online and I thought that was the way to go. I already had some design instincts, because at school I designed many things, including birthday cards. I realized that the days of getting a job based on what you studied at university are now over. I went online and took courses on UI/UX design on Coursera and Udemy. I also watched YouTube videos of some professionals already in the industry. This is what started my career. Through these courses I was able to navigate from chemical engineering to a UI/UX designer to a front-end developer. I am proud to say that I am now a top-rated-plus UI/UX designer and front-end developer on Upwork.

For me, this career path was very exciting because it gave me a choice. And this incredible power of choice has been made possible by the advancement of digital technologies. I am not the only one doing this. Many of my peers are doing the same, consistently upskilling or retooling themselves for the digital age because they know that is one of the ways young people can either find jobs or create work for themselves.

Through social media platforms like LinkedIn, Twitter, and Instagram, I share my experiences with other young people who are interested in trying out the path I have taken. I also learn from fellow freelancers, which has helped me advance in my career and as a person. This section shares the unique experiences of youth all over Africa, including myself, who have found work online.

Anastestia Onyinyechukwu Onyekaba
Youth panelist (Nigeria)

Figure 5 ▾

Jobs in a digital age

Source: Lorenceau, Rim, and Savitki, "Youth Aspirations and the Reality of Jobs in Africa"; African Development Bank Group, "Catalyzing Youth Opportunity across Africa"; Oliver Wyman and Junior Achievement Africa, "Youth Employment in the African Private Sector."

10 to 12 million African youth enter the job market every year, while only **3.1 million formal jobs** are created annually, leaving youth unemployed, underemployed, or starting their own business.
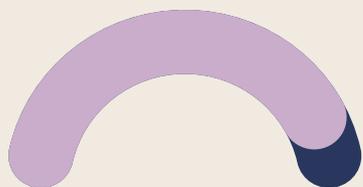
91% of youth in Africa aspire to start a business in the future, with 20% of them reporting self-employment as the sole job option in the future.

On average, the majority of African youth are engaged in medium-skilled occupations.

16% Low-skilled occupations | **76%** Medium-skilled occupations | **8%** High-skilled

Agriculture remains an important source of jobs for many young people in Africa, followed by trade and transportation.73

39% African youth in agriculture

26% Trade and transportation

14% Manufacturing and construction

14% Manufacturing and construction
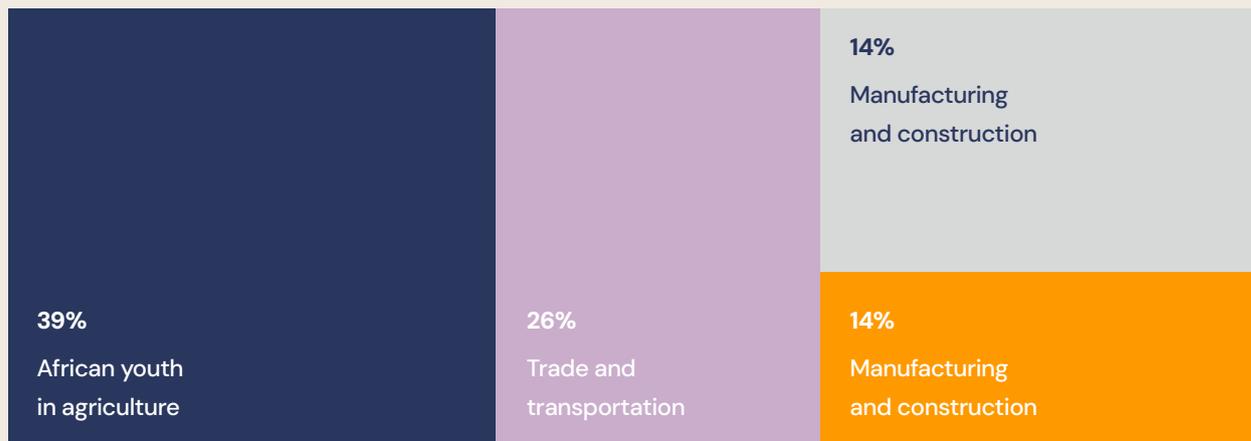
What jobs and livelihoods in a digital age mean to us

As digital technologies become more embedded in our economies, they have changed how we find and do work as young people. The *story of Victor*, an information system analyst at a top university in Nigeria, shows the potential of the digital economy to create formal jobs for young people in sectors like agriculture, manufacturing, health, education, services, and creative work. As digital technology replaces analog systems, demand for digital-savvy workers rises.

Digital technologies are also enabling us to engage in various forms of digitally enabled informal work. We are online freelancers, ride-hailing taxi drivers, and online sellers. To us, having jobs and livelihoods in a digital age means:

More income-generating opportunities: The growing ICT sector in our countries is creating new jobs that did not exist for our parents. With the right skills, we can find jobs as software developers, IT specialists, programmers, and UX designers, among others.

More choices: Because of the options that digital technologies offer, we can choose what we want to do, from starting a small business selling items on Facebook before we finish university to doing jobs via online freelancing platforms like Upwork or Fiverr.

Freedom to chase our dreams and pursue passions: Sometimes we start on a different path determined by what we studied at school but later learn new skills and gain knowledge that allow us to branch out and turn our passions into livelihoods. Digital technology makes this possible.

A path to financial independence: We yearn for financial independence. We look and find opportunities online through which we can earn enough money to support ourselves, our families, and our communities.

Breaking barriers and optimizing opportunities as young women: Sometimes technology removes barriers to work opportunities that women face in the offline world, such as a lack of capital to open a physical shop. Instead, a woman can open a virtual shop on an e-commerce platform.

We come from countries where many of us struggle to find employment, even after several years of education. Therefore, we are ambitious and create new paths to livelihoods for ourselves and others through digital platforms. However, we remain cognizant of the fact that stable formal employment for young people is still one of the most promising paths. It has a higher multiplier effect on the economy than the informal employment that most of us are involved in. We enjoy being our own bosses but that means we don't get the benefits that formal employment provides.

Digitally enabled livelihoods

In 2021, the ILO released the first report that painted a critical picture of how digital technologies are transforming work around the world.[40] At the core of this new world of work are digital platforms. These platforms, from international giants like Uber, Facebook, and Google to dozens of regional and local players like Jumia and SafeBoda, play a role in extending new livelihood opportunities throughout Africa.

Over the last three years, the Mastercard Foundation and Caribou Digital have explored this new way of work through the experiences of young men and women across Africa. This is referred to as "platform livelihoods"—a variety of new ways of working, trading, renting, and creating online.[41]

Working

When people rely on platforms to match their labor to compensation outside the contexts (and any protections) of employer-employee relationships, they're earning a platform livelihood.

Renting

When people lend or lease an asset such as a tractor or truck by the hour or day, or offer a room of their house on Airbnb, or lend (rent) money on peer-to-peer loan platforms, they're earning a platform livelihood.

Trading

When people or small businesses offer products and services to customers through marketplace platforms (such as Amazon) and/or through social media, they're earning a platform livelihood.

Creating

When Instagram influencers, YouTube and TikTok content creators, and affiliate marketers get paid for bringing attention to content (or to the ads placed alongside that content), they're earning a platform livelihood.

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40   ILO, *World Employment and Social Outlook 2021.*
41   Caribou Digital and Donner, eds., Platform Livelihoods Project.

Platform livelihoods fall into eight categories where young people have found opportunities. To understand how and why they are doing this, watch the videos of the young men and women in Ghana, Nigeria, and Kenya who shared their stories during Caribou Digital's various research projects on platform livelihoods.

SECTOR: CREATIVES

SECTOR: ASSET SHARING

SECTOR: MSEs

SECTOR: FARMERS

SECTOR: FREELANCE & MICROWORK

SECTOR: LOGISTICS

SECTOR: RIDE HAILING

SECTOR: TRADES & SERVICES

It is clear that young men and women across Africa are engaging creatively and ambitiously to take advantage of digital platforms. Still, there is much more to do to support them to turn these platform livelihoods into meaningful, dignified, and fulfilling work.

Technologies offer new employment opportunities

As Victor, the information system analyst, mentioned earlier, the ICT sector opened an employment opportunity for him. Indeed, this sector has potential to be a larger future employer for young Africans if they get the right skills. Currently, Africa is experiencing a critical shortage of both skilled technicians and highly qualified workers in science, technology, engineering, and mathematics (STEM).[42] Yet a highly skilled labor force is associated with higher earnings. This is an opportunity that we already see. Many of our peers are studying courses at university that can fill this gap. They want to be data analysts, cybersecurity specialists, database managers, software developers, 3D designers, programmers, and more. Technology and ICT are redefining the future of work, and we are preparing to be key players in that future.

Jemima, a graduate of economics from Kwame Nkrumah University in Ghana, had a tough time finding a job. She later became employed in a technology company after she took online classes in software development. She is encouraging girls to take up STEM because she knows its value.

"After I finished university with an economics degree, I started looking for a job, but I couldn't find one. […] But with online learning platforms like Coursera, I was able to learn software development. And that landed me my first job, with an e-mobility company, to build platforms to support their services and in-house operations. I've also had the opportunity to meet girls to encourage them that [technology] is not just for boys. That if we put our minds to it, we can do it, we can reach wherever we want to get to, and digital technology can help us."

Jemima, youth panelist (Ghana)

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42   African Development Bank, "Skills for Employability and Productivity in Africa (SEPA) – Action Plan, 2022–2025."

We create our own paths to work

Digital transformation is already creating many formal sector jobs that many yearn for but few can get. At the same time, it is also creating opportunities in the informal sector, especially for self-starting entrepreneurs.

Sharon in Eldoret, Kenya, trained as a teacher but didn't pursue that path. She instead decided to start not one, but two businesses online. She is taking advantage of digital platforms such as Airbnb and Booking.com to rent out several properties in Kenya. She employs cleaners and managers to help with her business. Sharon also runs a children's clothing shop online and uses YouTube to market her interior design skills.

"I comfortably earn something from home. I also have a YouTube channel where I show my skills. I do interior decor, so people get to watch my channel, get ideas of what they need in their houses, or even hire me for a whole house makeover or to do the interior decor for their houses. I have been able to market my skills and get online clients through such platforms."

Sharon, youth panelist (Kenya)

In Kenya, young people are looking to farming as a livelihood because digital platforms make it possible for them to both learn how to do it well and find a market for their produce. For many farmers, social media platforms have become a key part of their operations. This is called social agriculture—the ways farmers use social media to support their agricultural livelihoods.[43]

Beatrice is one such young farmer. She grows tomatoes, watermelons, and a range of other crops. She has a successful Facebook page and runs groups on Facebook and WhatsApp with thousands of fellow Kenyan farmers, growing a community of both young and older farmers.

"So basically, social media and farming are very related. You cannot escape. It's like you're farming in the darkness, when you are not on social media. There are so many opportunities. You grow, you're able to sell without even going anywhere. It's a good opportunity for farmers."

Beatrice, young farmer (Kenya)[44]

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43   Habitus Insight and Caribou Digital, *Social Agriculture in Kenya: Farmers' Stories of Their Use of Social Media for Agricultural Livelihoods.*

44   Habitus Insight and Caribou Digital, *Social Agriculture in Kenya: Farmers' Stories of Their Use of Social Media for Agricultural Livelihoods*; Caribou Digital, "Are These the Most Innovative Farmers in Africa?"

But some of us in rural areas are unable to take advantage of the opportunities that digital platforms offer because we lack the necessary knowledge and skills.

"*Most of the youth and women don't have smartphones because they can't afford one, but most of those that have managed to buy one are ignorant about how to use them to generate income. Same applies to other gadgets. Pointing them to the right digital platforms may help them get inspired to innovate or use the available [opportunities] to make money. The digital platforms include: 1. media platforms (Facebook, Instagram, etc.); 2. knowledge platforms (Google and Yahoo); 3. media-sharing platforms (YouTube). Some are on these platforms but don't know that they're sitting on money. Therefore, training them on how to use these platforms in the right way may help them to become digital entrepreneurs.*

Young woman, self-employed (Uganda)[45]

Digital technologies facilitate job searching

Using digital platforms opens up opportunities we did not think existed. Sometimes, as we relive our experiences online, we draw the interest of potential employers. Take the case of Faith, who was recruited by an NGO because of her Facebook posts. She continues to work part time for the organization while she attends university.

"*At the time, what I was sharing the most about was postpartum depression because I just had my son. [...] I was using social media as [an] outlet [for] what I was going through, how I was feeling, just things I thought were random basically. Some of that had to do with albinism because I have albinism and my son also has albinism. [...] It's one thing to live this experience. It's another thing for me to take care of a child that also has the same condition. So, I was learning a lot. I was having to be keen about a lot. That's where the albinism advocacy [came in]. I think I didn't see it as being that at the time, but looking back I think that's what it was. And so, it made me compatible with the [NGO] because the project they were working on had to do with raising awareness on albinism [and] talking about mental health for people with albinism.*"

Faith, youth panelist (Kenya)

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45   Diepeveen and Phiona, "Youth-Led (Digital) Innovation and Resilience during Covid-19: Experiences from the African Continent."

Patience, the digital communications consultant, uses social media to build her professional profile and in the process gets more work opportunities. Aside from earning an income, in her free time she works to amplify the feminist causes that are close to her heart.

"Social media platforms have enabled me to acquire jobs like social media influencing and social media management. I publish my clients' work on my platforms and showcase some of the work I have done, which has opened opportunities for me in the digital space. Apps like Slack, Google Chatroom, Zoom, and social media management apps have enabled me to work remotely for international organizations that don't have offices in Uganda. [...] Apart from getting jobs online, I use my social media platforms as a feminist to amplify the voices of women in my community. This is through online crowdfunding [and] raising awareness about issues like sexual violence and domestic violence."

Patience, youth panelist (Uganda)

We seek the freedom to chase our dreams and pursue passions

Different digital platforms have enabled us to create, develop, and build livelihoods. We have explored our passions and talents, showcased them, and made a living from them. Earnings may not amount to much, but we consider this a starting point to creating a livelihood for ourselves and our families. Many of us have started small businesses selling goods and services online. We may not have the capital to rent business premises, but with passion, a phone or computer, internet access, and digital skills, we become entrepreneurs.

Elikem, an event planner, runs her business on Instagram, Facebook, and WhatsApp. It all started with a passion. Winifred, a baker, shares a similar experience.

"Personally, I like organizing things. I like partying, events, and all that. So, I realized I find joy and happiness doing all of it for free. Just tell me what you want, and I will try and come up with something. So that was what I was doing [since earning my] degree in 2012. [...] I didn't really take it seriously but moving forward, I realized this also could be another source of income. So, I started putting plans and ideas in mind to get the company a logo [and] name."

Elikem, event planner (Ghana)[46]

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46   Anyidoho, Darkwah, and Caribou Digital, *Women and Platform Livelihoods: Lessons from Ghana.*

"I realized that any time I baked, I had a lot of fun, so I started baking. I used to bake for the family. When I realized that it could fetch me some income, I started selling the muffins that I baked and that started my company."

Winifred, online food vendor (Ghana)[47]

We are sometimes inspired by peers to venture into online business. This is how Florence started selling curtains online.

"After completing my diploma in marketing, I got an idea from a friend who was selling different things. I didn't have any money like when one prepares to start a business. So, I went to Eastleigh [shopping area] and did my research [about] the fabrics and their cost. Then I started posting the fabrics on my Facebook profile just to gauge people's reaction. It was positive. That's when I came up with the idea of opening my page on Facebook before I started it on Instagram."

Florence, online seller (Kenya)[48]

Some of us have full-time jobs but use digital platforms to earn an extra income from our passions through "side hustles." In Nigeria, Ase runs two businesses and relies on Facebook, Instagram, and WhatsApp.

"I have a nine-to-five job, but I also have two businesses. One is a healthy Nigerian snack that is produced, then distributed and marketed by me, and the other one is the fragrance business."

Ase, online seller (Nigeria)[49]

Some of us quit jobs we did not find fulfilling to do something else. Digital platforms enable us to do this.

"I used to work with a real estate company. I got tired of spending Monday to Sunday on less pay. It was really time consuming. Then someone introduced me to driving. I use Bolt and Uber. The job is flexible, it's not just about the money. I can wake up anytime I want, work for a certain number of hours, and go home."

Mercy, driver (Nigeria)[50]

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47   Caribou Digital, *Women in the Platform Economy: Women's Experiences of Platform Livelihoods in Ghana, Kenya, and Nigeria.*

48   Qhala and Caribou Digital, *Different Shades of Women in Platform Livelihoods: Stories of Resilience and Empowerment from Kenya.*

49   Lagos Business School and Caribou Digital, *Platform Livelihoods and Young Women's Economic Empowerment in Nigeria.*

50   Lagos Business School and Caribou Digital, *Platform Livelihoods and Young Women's Economic Empowerment in Nigeria.*

For young women, digital platforms can break barriers

Some young women are using digital platforms to break barriers and enter male-dominated sectors. For example, more and more women are driving ride-hailing taxis in Kenya and Uganda using apps like Uber, Glovo, and SafeBoda.

"I used to sell shoes, but it was not making profits, so I decided to start this business. I hired a motorbike and started. I get money to feed my kids and I also save. After a year of saving, I joined a sacco [savings scheme] and I was able to buy my own bike."

Alice, driver (Kenya)[51]

"I chose this work because it's not easy to get a job in Kampala. I was operating a mobile money kiosk [and] a restaurant, and I tried a salon, but it was not profitable. That is why I decided to join SafeBoda because I can get more money to feed my family. At least when I work with a motorcycle, I can get money to care for my family."

Dathive, motorcycle rider with SafeBoda (Uganda)[52]

For women, online work means financial independence

Financial independence is important to us as young people. We find opportunities that can wean us off our parents' support. With financial independence, we can make bigger plans for our future. For example, for Cecelia, who sells beauty products online, running her own business online has created a path to financial independence.

"I come from a background that doesn't have much, and I am one person who doesn't want to settle for less. The first thing I like to mention is being independent. Like having my own money where I can buy whatever I want. [...] I am not able to buy everything I want,

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51   Qhala and Caribou Digital, *Different Shades of Women in Platform Livelihoods: Stories of Resilience and Empowerment from Kenya*.

52   Caribou Digital, "Dathive, the Motorcycle Taxi Driver."

but at least I can buy some basic things. And then taking good care of myself, like eating good food, buying good cosmetics, sleeping in a very comfortable place. [...] One of the goals that I had was to move out of my parents' house and have my own place, and I have been able to do that. And then one goal I also have is to be able to build my own house by 2023."

Cecelia, digital marketer (Ghana)[53]

For young married women, financial independence is even more important. Many, like Adobea, a Bolt driver, have found this by using digital platforms to find work opportunities.

"My decision was to be independent. I wanted to be myself. Like on weekends when I am going to the salon, I am not going to tell my husband, 'Please I want to go to the salon.' [...] I wanted to be independent and have my own money and if I want to buy something I will just buy it. I don't have to explain why I want to buy something or why I want to wash my hair."

Adobea, ride–hailing driver (Nigeria)[54]

As mentioned earlier, digital technologies help provide independence to those of us with disabilities. For Justina, an entrepreneur, digital platforms support living independently, including financial independence.

"I am a fish farmer [and] a graduate of adult education and community development, and I also am a woman using digital platforms to promote my businesses. I'm visually impaired. I started the fish business in 2019. At first [...] I was going from door to door. I would carry my fish in this huge 'Ghana-must-go' [bag], very bulky, [and] heavier moving from one place to another. With my disabilities, it was a big challenge for me. I couldn't cover the multitude I'm covering now, so I was just selling to one-on-one contacts. But when my friend introduced me to the idea of selling online, I got myself involved in different social platforms. It became so easy and that was how I expanded my business. There are some challenges, yes, but it also boosts my financial income because of the huge market."

Justina, online fish seller (Nigeria)[55]

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53   University of Ghana and Caribou Digital, unpublished interview transcript on women and platforms in Ghana.

54   Lagos Business School and Caribou Digital, unpublished interview transcript on women and platforms in Nigeria.

55   Caribou Digital, *Women in the Platform Economy: Women's Experiences of Platform Livelihoods in Ghana, Kenya, and Nigeria*.

Paths to online jobs and livelihoods are full of challenges

As shared in the *section on access*, the internet can expose us to harm, including when we're looking for jobs. Moses, for example, was applying for what he thought was a United Nations Volunteers job, only to find out that the person behind it was a scammer. Fortunately, he did not complete the application once he reached the point at which he was expected to pay before moving to the next stage.

Even when jobs posted online are legitimate, those of us with visual impairment are disadvantaged if the websites are inaccessible to screen readers. This is the predicament Papi and Yvonne find themselves in, as they cannot access the content on the website hosting government jobs using their screen readers.

For freelancers and those of us running small businesses online, income is not always guaranteed, especially when starting out before establishing a customer or client base. On top of that, working independently, without the support of an employer and a set salary, is difficult. Formal employment usually comes with health insurance, pension, and other benefits that we don't automatically have when we work independently.

"If you are sick when you are employed, you will still be paid at the end of the month. It is guaranteed. But with entrepreneurship, it's different; you can make so little in some months."

Justina, online seller (Ghana)[56]

Many of us have the passion and the talent to enhance and expand our online businesses to the next level, but we lack the required capital. Many banks won't lend money to young entrepreneurs. Moreover, female entrepreneurs face additional challenges when working online, such as sexual harassment, bullying, and inappropriate requests from male clients. We fear for our security in situations where we come into contact with clients as passengers in cars or on a motorbike. We also find it challenging to juggle work and childcare duties.

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56   Anyidoho, Darkwah, and Caribou Digital, *Women and Platform Livelihoods: Lessons from Ghana.*

Women and digitally enabled livelihoods in Africa

In 2021, the Mastercard Foundation supported research on how women in Ghana, Kenya, and Nigeria are using digital platforms to earn a living (platform livelihoods). Some 150 young women shared their experiences. They included women working as freelancers on global platforms, providing services like voice acting, virtual assistance, transcription, and software development. The researchers also talked to women working as drivers or combining delivery and driving through ride-hailing platforms like Uber and Bolt; women renting out premises on global digital platforms like Airbnb and Booking.com; and women selling items on social media (e.g., Facebook and WhatsApp) and e-commerce platforms (e.g., Jumia).

The research found that:

- Platforms provide women with opportunities for reasonable livelihoods, income, and empowerment in the form of money, personal fulfillment, and financial independence.

- There are pros and cons to the flexibility that comes with working online or working for oneself. Women still have to juggle this work with existing household workload or responsibilities. Men who work online don't face this challenge.

- Women constantly worry about their safety. It could be a woman who sells curtains online and has to install them in a male client's home, or a female driver who feels unsafe every time she gets a male client.

- Women, more than men, have to deal with misconceptions about online work from family and society that think that this kind of work is not dignified for women or that it should be left to men. Despite these attitudes, many women have pushed back and continue to work.

Hear from young women directly

In these videos, nine young women who work online shared their experiences.

Watch the videos
https://www.platformlivelihoods.com/gender-report-videos/

JACKLINE: TRADING

BLESS: TRADING

PHYLLIS: TRADING

JOSEPHINE: TRADING

AYOBAMI: WORKING

BLESSYN: WORKING

ZUMUNTA: TRADING

SHARON: RENTING

LOISE: WORKING

Action steps to support and enable jobs and livelihoods in a digital age

Our discussions as a panel on how governments and development partners can support and enable our jobs and livelihoods in a digital age yielded some proposals for further discussion.

Job opportunities on digital platforms   J O B S

Recognize digital platforms as a source of job opportunities for us. This will ensure that we are included in development plans around skilling, funding, and other programs that might target young people who want to find work online.

Opportunities for capital   J O B S

We are bursting with ideas for new businesses and startups, but we lack the funds to start. Governments, development partners, and nongovernmental organizations should work with financial institutions to provide capital. There are riders who wish to own a fleet of motorbikes, short-stay accommodation providers who wish to lease more properties, and farmers who want more land for agriculture, among others. We want to build and grow our businesses, and we need funding for our various needs.

Burdens as caregivers and earners   J O B S

Many of us, especially young women, carry a double burden as both caregivers for family members and full-time earners to support our families. Subsidizing or providing affordable childcare options would make the load for young women lighter. Men should be encouraged to share care responsibilities instead of leaving them to women.

Social protections   J O B S

Those of us engaged in making a living through online platforms deserve the same social protections and security as those with full-time positions with companies or governments. Generate conversations around providing health insurance, disability allowances, retirement benefits, and worker's compensation for those working online.

Choice in a digital age

Bandagne Fall
Youth panelist (Senegal)

"The path my future would take was entirely in my hands."

My name is Bandagne Fall and I am from Senegal. I am very excited to introduce this final section, which discusses choice in a digital age. Choice means opportunity, freedom, and options. Today, digital technology makes many opportunities more accessible, no matter the distance. This translates into more choices for us young people born and raised in a digital age.

I have experienced the joy of having choices. Thanks to digital technologies, I have applied for and found opportunities in nongovernmental organizations and institutions such as CorpsAfrica, the African Union, and the Community Engagement Exchange program, which is a fellowship funded by the US government. These experiences have given my career a completely different direction from what I had set my sights on while in college.

I learned that by doing just a little research online, I could access many opportunities for training, funding, and professional development. This has taken my ambition to new levels. I feel capable of accessing positions and a level of success that I thought were reserved for the privileged. By making good use of digital technology, I knew that I had a choice and that the path my future would take was entirely in my hands.

Unfortunately, many youth in Africa have limited or no access to digital technologies. Our governments need to find a way to make digital technologies more accessible for youth by lowering the cost of internet data bundles, improving the stability of the internet, and giving youth a way to purchase devices easily. This will provide options for young people to chase their dreams.

Yet, we can only take advantage of these many opportunities if we have the right skills. Sometimes young people who have access to digital technologies don't make good use of the internet. Policymakers should integrate the use of the internet in education from middle school onwards, so that young people are familiar with it early in life and learn to use it responsibly. This goes beyond teaching them how to use a computer, but also sensitizing students on how to use the internet to increase their choices.

Figure 6 ▾

Choice and livelihoods

Source: Lorenceau, Rim, and Savitki, "Youth Aspirations and the Reality of Jobs in Africa"; Oliver Wyman and Junior Achievement Africa, "Youth Employment In The African Private Sector."

Almost 50% of young African students aspire to be self-employed, followed by more traditional jobs in large international companies and the public sector.

Self-employed	46%
Multinational companies	37%
Government/public sector	28%
Medium–large local companies	20%
Non profit sector	15%
Start ups	11%
Family businesses	8%
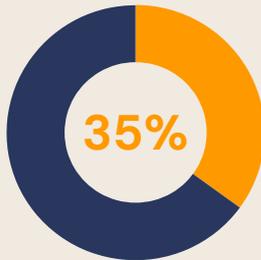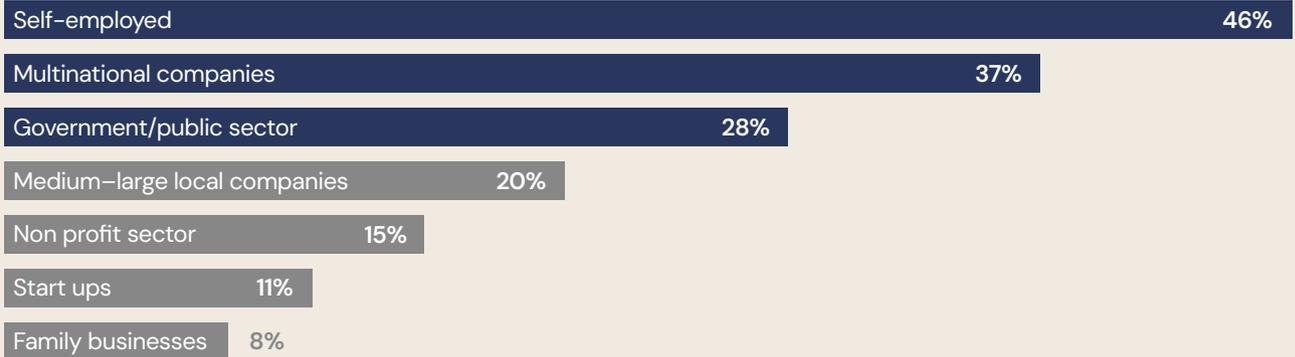
35% **of young Africans surveyed across ten countries say they are satisfied with their current job.**

Of those who wanted to change jobs, 40% cited higher pay as the reason.

Of those students who want to work in the public sector, only 12% will succeed in entering it.

■ **Desire** ■ **Reality**

Public sector
74% | 12%

Private sector
10% | 55%
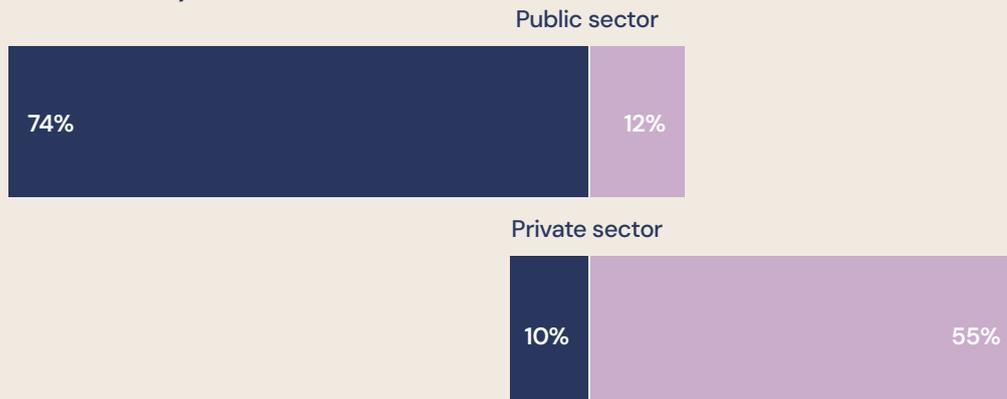
What choice in a digital age means to us

Choice in a digital age is both an enabler and a result of access, skills, voice, jobs, and livelihoods in a digital age. As we stated in the *introduction*, these themes are interconnected. Choice is unique in that it is the engine of the future we choose to build for ourselves and our communities. For us, choice means:

Access: This includes access to information and technologies that help us make informed choices about our lives. Without access, there is no choice.

Freedom: Digital technologies give us a sense of freedom: financial freedom in accessing dignified and fulfilling work, educational freedom in accessing global learning platforms, and geographic freedom in working from anywhere in the world.

Opportunity: Digital technologies provide more opportunities, if we choose to take advantage of them, to communicate with people, make money, and build relationships. We can choose to learn new skills, share our talents online, work remotely, or work abroad.

Agency: The power and ability to make decisions or choices based on what we've learned online from our peers and organizations around the globe.

Erica's analogy below helps explain that access goes hand in hand with choice.

"If you don't go to school because there are no schools in the community, it means you have no choice. But if there are many schools and you don't go to school, then there is a capability for you to be able to go to school. 'Cause you can choose from any of the schools within your community. In the same way [...] if you have no access to digital technology to provide information for you, then you have no choice and you are not able to make informed choices."

Erica, youth panelist (Rwanda)

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Access generates choice

For those of us living with disabilities, access to assistive technology can bring independence, jobs, and learning opportunities that would otherwise not be available. Yet, millions of people in Africa are deprived of their basic rights, such as access to education and the right to work, due to unmet needs for assistive technology.[57] Papi's experience living with a visual impairment attests to how this access is vital.

"When things are online, it's [...] easier for us to do anything. We can attend meetings in the comfort of our homes. We can take courses [...] online. I use Udemy, Coursera, and Canvas Student. It is easier for me to use those assistive tools than to go out. I can make [orders] online. I can connect with friends. I can attend meetings. It's more convenient to use these digital technologies than to go physically, because we [have] a lot of trouble when we [go] out. We seek someone to guide us. And some places are not fully accessible. So with technology, I can say that I've regained my independence."

Papi, youth panelist (Rwanda)

Samuel, a student in Ghana with cerebral palsy, learned to read and write on his phone, typing with his toes and communicating via WhatsApp. He shared his future career plans:

"I always wanted to build apps and do software programming. I also wanted to do my own work and not work for anyone. I wanted to be like Mark Zuckerberg and even more than him. I have always had more ideas about technology and want to help Africa. I see my future will be exciting. That is why I am doing IT. I started on my phone. I was learning C++ and C#, but I cannot continue since I don't have a laptop to do software programming and apps development. I want to help people, especially create jobs for the disabled in the future. That is my dream."

Samuel, student (Ghana)[58]

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57   WHO Regional Office for Africa, "AFR–RC71–11 Framework for Improving Access to Assistive Technology in the WHO African Region."

58   Boateng, Ampiah, and Mensah, "Voices of Youth with Disability on Aspirations, Barriers and How Youth Programming Can Respond to Their Needs."

Engaging online with people around the world boosts our confidence and communication skills, as Rachel shared. We may feel stifled in our own communities, but online platforms provide space and encouragement.

"In school, during group work [and] presentations, I used to have difficulties [when] talking in front of people. I used to be shy, but now you can see me. I'm talking fluently without stammering. I used to do that a lot, and mix the words. But lately, when I join meetings and participate, it's helping me in a way. It's building my confidence."

Rachel, youth panelist (Kenya)

Yet, lack of access can prevent us from making independent choices. Several students living with disabilities in three public universities within the Amhara National Regional States in Ethiopia (University of Gondar, Wollo University, Bahir Dar University) told researchers they had been forced to take courses they were not interested in because of lack of assistive technologies. Additionally, they lacked assistive devices like braille books to help them learn independently and had to depend on fellow students to read for them.[59]

It is frustrating too, when websites are not designed with needs of persons with disabilities in mind, as Yvonne shared.

"There are some websites which are not accessible for us. When I have to ask someone to read some information for me, it frustrates me a lot. It's like when I'm going to search [for] information or find some opportunities, like a job and [I have to ask] someone to help me to apply for that opportunity. [...] There are many obstacles we meet in our daily life. So, when it comes to[the] internet, I feel like I'm going to do everything independently. But when websites are not accessible, it frustrates me a lot."

Yvonne, youth panelist (Rwanda)

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59   Samuel et al., "The State of Assistive Technology and Its Implication on Visually Impaired Students Right to Education in Public Universities within the Amhara National Regional State, Ethiopia."

Developing digital skills offers more choices

Digital technologies come in handy for us when choosing what and where to study.

"She wanted to further her studies abroad and she had a lot of universities to choose from. Sometimes she even chatted with the professors. They helped her apply and everything. She attended information sessions, all online. She was in Ghana, and she was chatting with professors in the US, in the UK, [and] Canada. And at a point she felt that some of these universities didn't really have the scholarships that she wanted. And so, she opted out. This happened because she had a choice to make. It wasn't like, oh, okay, because she [...] spoke to the professor, like you are supposed to stick to this."

Sandra, youth panelist (Ghana)

At university, digital technologies give us access to more information on our areas of study and help us to better understand even difficult topics. Nafisa is among those who have gone online in search of knowledge and understanding.

"There was a day in school, during my undergraduate studies, when I didn't understand what was being taught in a particular course. I tried reaching out to many people to explain to me, but to my dismay they all refused to tutor me. This frustrated me and made me think of possible ways to teach myself. I later realized that I could use YouTube to learn what I didn't understand and so I went directly to it and searched the topics. There and then, I saw a variety of videos from different people about the topics. It took two straight days of studying to understand the topics, and the rest was history. [...] Digital technology was the key contributor to this choice I made, 'cause without a phone, laptop, or internet facility, I would not have got access to YouTube, therefore I wouldn't have been able to learn on my own."

Nafisa, youth panelist (Nigeria)

Building skills through digital technologies also gives us the ability to overcome challenges, particularly when we face situations outside of our control, like the COVID-19 pandemic, climate change, political upheaval, or economic crises. Jemima shared how digital technologies led to her career in software development.

"After graduating with a BA in economics with first class honors from Kwame Nkrumah University of Science and Technology [Ghana], I was faced with the challenge of getting a job. Coupled with it, I had no substantial amount [of money] to sponsor myself to continue with my master's degree. This led me in registering on LinkedIn and joining WhatsApp groups in quest of a job, network, and possibly [a] scholarship. I contacted a female empowerment and technology advocate, who introduced me to Scratch programming and from there, [I] developed an interest in software development. Aside from participating in in-person software engineering bootcamp training like Code Factory Africa and Azubi Africa Graduate Training Program to enhance my skills, I used platforms like w3schools.com, Pluralsight, and Coursera to learn more about software product design, development, and management."

Jemima, youth panelist (Ghana)

Digital technologies create more choices for jobs and livelihoods

As young people, we value independence. We cannot always depend on our parents or guardians. Digital technologies enable us to create our own paths to independence. Not only do we use digital technologies to start businesses, but we also use them to share our talents online, sometimes turning these into livelihoods. Many of us know comedians, artists, singers, rappers, TikTokers, and YouTubers who have monetized their talents and passions.

"Especially in Nigeria, we have many young people now who are using their talents to make content. They're content creators. They use their talent and skills to make money for themselves. We have comedians, those who teach and share videos, and so on. So, I believe digital technology has afforded young people many more choices than they would have had without it."

Ayomide, youth panelist (Nigeria)

In certain professional fields, digital technologies also give us the opportunity to work from anywhere in the world, and for organizations and companies based in multiple countries. For Anastestia, working as a freelance UX/UI designer has given her more choices and freedom than working for one company from one physical location. She uses platforms like Upwork and Fiverr, remotely from Dubai, to connect with clients all over the world.

"I had to choose between either working remotely or going to the work [place]. It was a tough decision. But in the end, I decided to work remotely because I could add the cost of the fuel and the internet when billing my client. I could maximize my time and work for more than one client. And working for only one person throughout the day and coming back exhausted, considering traffic and all [was not attractive]. So, in the end, remote [working] was more beneficial to me. Thanks to [existing] remote platforms, [...] it helped me transition quickly and easily. [...] These choices so far have impacted me because right now I can work from anywhere, any part of the world. Anywhere I am, I have various tools available for remote communication, remote and virtual coworking."

Anastestia, youth panelist (Nigeria)

Some government policies limit our choices

Regrettably, some government policies and actions can limit our choices. Patience's livelihood as a communications consultant was directly impacted when the Ugandan government blocked Facebook.

"I started my journey as an influencer on Facebook. My first digital marketing certificate was from Facebook Blueprint, so was my first job as a social media manager. The connections I made on Facebook helped me grow on other platforms. This was taken away when the government blocked Facebook. The engagement on the app has reduced and this is affecting other apps owned by Meta. I have missed out on gigs because clients contacted me on Instagram or Facebook and messages didn't reflect on my side, 'till I got a VPN. Which doesn't work well sometimes."

Patience, youth panelist (Uganda)

Sandra told us how her government's e-levy, a 1.75% tax on all mobile money transactions, has affected her personal and business finances.[60]

"It has collapsed a lot of businesses, because [nobody wanted] to do the e-levy. [...] Everybody was rushing to the bank and withdrawing all their money because that way we wouldn't have to be paying those taxes to the government. Everybody was trying to dodge the taxes, until most of the mobile money vendors lost their jobs because people wouldn't want to withdraw [money] from them. They would rather go to the bank. [...] It has really made things tough, because now if you go to the supermarket, things are expensive. We, the students, are really suffering. We are suffering because our parents can't come to the school and give us money. They have to send it [via mobile money]. And so if they are sending my school fees, [..] then it means they have to add extra charges."

Sandra, youth panelist (Ghana)

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60   Wikipedia, s.v. "E-Levy (Ghana)."

Gender norms affect young women's choices online

Gender norms and cultural expectations that exist offline often replicate themselves in the digital realm. For Beatrice, the choice to sell farm produce through WhatsApp groups gave her a sense of security. Before, she went to the market at three in the morning, which made her feel unsafe in the company of men. Another challenge she encountered when she sold her produce at the market was that brokers would cheat and scam her.

"Online, it is an equal market. [...] You are able to see what price it is going at, what price this person is coming to collect with, what price these people are setting [...] Basically online you just need a good camera, take nice pictures of your produce, and then post it to your people. So for online, it's a bit calmer, it's also faster for me [...] I don't have to go anywhere. I've sold so many things online just without even leaving my house, it's very convenient."

Beatrice, farmer (Kenya)[61]

In some cases, gender norms limit choices for young women. For example, young women participating in the Youth Forward program in Uganda shared that they do not own a mobile phone because their husbands do not allow them to.[62] This limits their choices around education, jobs, livelihoods, and managing their money.

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61   Habitus Insight and Caribou Digital, *Social Agriculture in Kenya: Farmers' Stories of Their Use of Social Media for Agricultural Livelihoods.*

62   Banga, Njambi–Szlapka, and Phiona, "Youth Enterprise Growth: Evidence from Youth Forward in Uganda."

Action steps to give youth more choices

During our meetings as a panel, we discussed ideas on what governments, development partners, private sector actors, and young people themselves could do to enable more choices in a digital age.

Center our voices   **C**HOICE

Listen to young people and center our voices in policy and programming that affect us. As we stated in the *introduction*, we are the leaders of today, not just of tomorrow.

Help us explore livelihoods and futures   **CH**OICE

Digital technologies open so many possibilities, opportunities, and futures for us, but the amount of information online can be overwhelming. Sometimes it is hard to know where to start or whom to trust. We encourage our peers to share their experiences working in various jobs and fields (like young entrepreneurs do on the MESH platform in Kenya), so we can learn from them.

Open regulatory barriers to access   CH**O**ICE

Do away with laws and policies that limit our access to apps or websites.

Include those living with disabilities   CHO**I**CE

Ensure online content (websites, apps, platforms, etc.) is accessible to those with visual and hearing impairments to give them choices in a digital age.

Champion tech development   CHOI**C**E

Support the development of digital technologies that enable, rather than limit, our choices. Train us on how to use these digital technologies to help us make the best possible choices for ourselves, our communities, and our countries.

Enable access for all   CHOIC**E**

Consider the recommendations we've made around *access to digital technologies* and *building digital skills*. To truly enable us to make choices around our education, jobs, livelihoods, families, and activism, we need access, first and foremost, to digital technologies.

Conclusion
Looking to the future

We have taken you on a journey of how we access and use digital technologies to learn, work, express our voices, and make choices about our future. We have shown how, through digital technologies, we have learned new skills, found work and made livelihoods, created employment for others, and contributed to our communities.

Indeed, technology has put the power in our hands. We have choices. We are building our own future.

Africa is more digitally connected than it was five or ten years ago, even though there are still many gaps. The COVID-19 pandemic showed us that digital technology can be life-changing for many young people who were able to learn online, stay in touch with family and friends, or work remotely. We are a growing and vibrant young population bursting with ideas on how to make the continent better. We know that technology alone will not fix everything, but it can provide a launchpad for many of us.

Yet many of us cannot do these things due to a lack of access to digital tools like computers, the internet, smartphones, and the skills to use these. Some of us cannot afford devices or lack internet connectivity, especially in rural areas. Those of us who have visual and hearing impairments are limited by websites that are inaccessible. For young women, gender stereotypes limit access to the benefits of digital technologies. In some countries, government policies have interfered with access to apps and sites.

Our governments must commit not only to improving access to the internet and digital technologies, but also to ensuring that all young people have

the right skills to use them meaningfully and productively. This includes considering the unique digital technology needs of young women, youth living with disabilities, youth living in rural areas, and youth fleeing from violence and conflict.

There are many things we wish for the generations after us: Affordable electricity and internet everywhere. Online education for all who need it. Remote work. More jobs. Better digital security and data privacy. The list is long. But all this must be buttressed by good governance, physical safety, care for the environment, and adequate health and education systems, among others.

These are truly exciting times to be young. We look forward to playing a critical role in shaping artificial intelligence for the future Africa. If we embrace opportunities, address challenges, and actively participate in the development and deployment of AI, we can ensure this transformative technology serves as a tool for empowerment, innovation, and sustainable development across the continent.

Methodology

Caribou Digital reviewed 363 documents provided by the Mastercard Foundation. Fourteen percent (51/363) of the documents were relevant to the scope of young people's experience with digital technologies in Africa. An analytic induction of the documents was conducted using Dovetail, an online qualitative analysis software. Caribou Digital started the analysis with deductive themes based on a framework agreed upon by Caribou Digital and the Mastercard Foundation and continued to look for undiscovered patterns and emergent themes throughout the analysis.[63]

From July 2022 to January 2023, Caribou Digital convened a youth panel to consult as experts on their experience with digital and to co-create this publication. The twenty youth panel members were from Ethiopia, Ghana, Kenya, Nigeria, Rwanda, Senegal, and Uganda, and included members of refugee communities and young people living with disabilities. The panelists interacted via Zoom, WhatsApp, and email.

The key ethical principles of voluntary and informed participation and safety of the young people were applied in all interactions between the panelists and Caribou Digital and the Mastercard Foundation. The panelists were given written information about the project and informed that their participation was voluntary. They were free to withdraw from participation at any time. Youth panel members were paid a stipend to compensate for their time and internet usage.

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63   Patton, *Qualitative Research and Evaluation Methods*.

Glossary

4G and 5G	The fourth and fifth generations of mobile network technology
Airbnb	Online marketplace and hospitality service that allows people to rent or lease short-term lodging accommodations
Bolt	Ride-hailing platform
Booking.com	Online travel agency and accommodation booking platform
C#	Modern, object-oriented programming language developed by Microsoft
C++	General-purpose programming language
Coursera	Online learning platform
DM	Direct messaging
Facebook	A social media platform
Fiverr	Online freelance marketplace
Full-stack web development	The practice of designing, developing, and implementing all components of a web application
Google Chatroom	A feature in Google Chat that allows users to create virtual rooms where teams can work together
GoogleMeet	Video conferencing platform
ICT	Information, communication, and technology
Instagram	Social media platform
JAWS	Job Access With Speech, a screen-reading software
LinkedIn	Social media platform
Mavis Beacon Teaches Typing	Typing tutor software
Meta	The parent company of Facebook, Instagram, and WhatsApp
Netflix	A subscription-based streaming service for TV shows, movies, and other entertainment content

NGO	Nongovernmental organization
Pluralsight	Online learning platform
Python	High-level programming language
SafeBoda	Ride-hailing and delivery service
Slack	Cloud-based team collaboration and communication platform
STEM	Science, technology, engineering and mathematics
TikTok	Social media platform
Twitter (now X)	Social media platform
Uber	Ride-hailing platform
Udemy	Online learning platform
UI/UX	User interface/user experience
Upwork	A global freelancing platform
VoiceOver	A screen reading feature on Apple devices
VPN	Virtual Private Network, a technology that creates a secure, encrypted internet connection
w3schools.com	Website that provides tutorials, documentation, and examples on web development technologies
WhatsApp	A messaging app to send text and voice messages, and make video and voice calls
YouTube	Online video-sharing platform
Zoom	Video-conferencing platform

About the authors

Akinnibosun Victor Abayomi (Nigeria) is an information system analyst at the National Open University of Nigeria and founder of TekSpunk Hub, a tech hub born out of a passion for equipping teenagers and marginalized young adults with technology skills for the future of work. TekSpunk Hub has empowered over 100 young Nigerian adults with digital skills. Victor has previously worked with the Nigerian Global Affairs Council as a Non-Resident Policy Fellow to simplify technology policy and its communication to a non-technical audience. He has volunteered as an IT Trainer for the National Information Technology Development Agency (NITDA) in collaboration with the National Centre for Artificial Intelligent and Research (NCAIR) to train 50 Nigerians in Python programming. He has also volunteered at One African Child, a center for creative learning as a digital awareness trainer and media director of the southwestern region of Nigeria. Victor is committed to preparing young Nigerians and Africans with digital skills for the future of work.

Akintobi Ayomide Ezekiel (Nigeria) is a student of political science at the University of Ibadan in Nigeria. He has albinism and speaks out against stigmatization of people with albinism. He is a passionate writer, a public speaker, and a student leader. He has been a class representative since his first year as an undergraduate. He was named the most outstanding class representative in the Faculty of Social Sciences in his two full academic sessions in the faculty. He is a member of the faculty's Educational Development Committee and of the Academic Committee of the Faculty of the Kenneth Mellanby Hall, University of Ibadan. Akintobi is also the public relations officer of the Kenneth Mellanby Hall Literary and debating society.

Anastestia Onyinyechukwu Onyekaba (Nigeria) is a UI/UX designer and frontend developer with a BSc degree in chemical engineering from the University of Lagos. She is a cofounder and the CEO of N&S Tech, an agency that brings business ideas to life with a team of quality developers and designers whom she has mentored. Through N&S, she has trained and provided job opportunities to over 20 freelancers. During the COVID pandemic Anastestia learned UX design and frontend development; she is now a top-rated full-time freelancer on global freelancing platform Upwork. She loves traveling in her free time.

Bandagne Fall (Senegal) is an engineer in agronomic sciences and agribusiness. She is passionate about community development, building resilient and sustainable communities, youth employability, and gender issues. She is an entrepreneur and is currently working at the Institute for Sustainable Communities in Washington, DC. She has experience working in private and public Senegalese companies in the agrofood industries. In addition, she has worked with international institutions and nonprofit organizations such as CorpsAfrica, the African Union, and the Community Engagement Exchange Program. Bandagne is the head of organization and planning of the Mastercard Foundation's Alumni Committee in Senegal. She is a Design Thinking trainer. In her service to the community, she trains women and girls in saponification, bleaching, and reusable sanitary napkin-making techniques.

Erica Matasi Gateka (Burundi) is a seasoned social entrepreneur and development consultant with a background in non-profit organizations and community projects. Originally from Burundi, Erica currently lives in Rwanda. She is the co-founder and CEO of Love and Hands Ltd, a social enterprise that promotes asset-based solutions in Rwanda and Burundi. She also works for the Kurumbuka Leadership Solutions Foundation as the Executive Leaders Program director. She is knowledgeable and skilled in organizational leadership, project management, partnerships, marketing and growth strategy, training, asset-based community development, grassroots activism and advocacy, business coaching and mentorship, and public speaking. She has an MA in Development Practice from the University of East Anglia, UK, and a BA in Business Administration (Accounting major). She is deeply committed to promoting and developing African solutions to African problems using available resources.

Faith Musyoki (Kenya) is a Mastercard Foundation Scholar at USIU-A, pursuing a BSc in applied computer technology. She is an activist for albinism awareness and skin cancer prevention and is passionate about equity, empowerment, and inclusivity of all people, but especially women with disabilities.

Hussein Tadicha Jillo (Ethiopia) lives in Kakuma Refugee Camp, Kenya. He is passionate about advocating for economic transformation of marginalized communities, including women and girls, displaced populations, and people living with disability, in mainstream economic activities. He is a member of the Refugee Advisory council convened by WUSC through the DREEM program and a young person living with disability. Jillo runs a digital literacy training program in the camp.

Jemima Adjanor (Ghana) is a frontend angular developer who doubles as a software development project manager for SolarTaxi Limited. She has three years of experience owning all stages of the software development project life cycle, from planning through monitoring and closing. She always seeks new challenges as a project manager and software developer.

Mihret Walelgne (Ethiopia) recently graduated with a bachelor of nursing and management from Jigjiga University. She is the founder and CEO of a civil society organization (I for My Sister) that seeks to promote gender equality. She also cofounded a nonprofit organization that provides sanitary pads to school girls. She is an alumna of the Young African Leaders program and a board member of the African Women's Leaders Network.

Moses Serwadda (Uganda) works as a program manager for the Uganda Federation of the Hard of Hearing. He is also an independent researcher on hearing loss, supporting the World Hearing Forum, an initiative of the World Health Organization whose purpose is to mitigate hearing loss and deafness. He supports people living with stigma as a result of loss of hearing through counseling and guidance. He also conducts capacity-building activities for members both within the rural and urban areas. He has been recognized as a senior hard of hearing advocate and served on different youth forums representing hard of hearing persons. He is currently serving as president of the African Federation of Hard of Hearing and a member of the International Disability Alliance youth committee. He is married with two daughters.

Nafisa Abdulaziz (Nigeria) lives in Abuja. She is currently undergoing her National Youth Service as a trainee in Greenville Liquified Natural Gas Co. Ltd. She's a graduate of chemical engineering and hopes to further her education in petroleum engineering. She currently runs a home catering business selling tofu, rice cakes, and other foods, and plans to open a restaurant. She wishes to learn tailoring, interior design, photography, graphics designing, gift packaging, and makeup.

Papi Sibomana (Rwanda) is a visually impaired young leader interested in digital inclusion, disability advocacy, and entrepreneurship promotion. He has an interest in helping to remove barriers to free education for youth with disabilities and helping them to transition to decent work. As part of his community engagement, he mobilizes and encourages youth with disabilities to become leaders in their respective communities. He also volunteers as an entrepreneurship and technology trainer at Seeing Hands Rwanda, where he oversees the creation of income-generating activities and access to and usage of information and communication technologies among youth living with disabilities. He holds an MS in innovation, management, and entrepreneurship from the University of Portsmouth, UK.

Patience Ahumuza (Uganda) is a digital communications consultant. She is passionate about helping people and organizes digital crowdfunding campaigns. In August 2021, Patience and a friend raised UGX4,760,000 in cash and in-kind donations to feed and cater for the needs of 50 households. They did this through the hashtag #20kForMbale, under #AhelpingHand, a risk-mitigation platform.

Rachel Athiak Makuei (Kenya) was born in Kakuma Refugee Camp, Kenya. Rachel, a graduate of law from the Catholic University of Eastern Africa, is currently in pursuit of employment while actively engaging in volunteer work with organizations such as the Mastercard Foundation and World Service of Canada (WUSC). Her commitment lies in advocating for equal opportunities for refugees to contribute to their communities. Rachel aspires to establish her own law firm, aiming to create opportunities for young people and provide legal support to refugees in need. For Rachel, attaining her current level of education as a refugee has been a journey marked by numerous obstacles. Volunteering allows her to share the collective stories of refugees and advocate for their needs. Additionally, she actively participates in initiatives like the Kenya Model United Nations conferences and serves on the Displaced and Refugees Youth Enabling Environment Mechanism advisory team. Rachel is dedicated to advocating for improved policies benefiting refugee students. In her leisure time, she finds joy in reading, watching movies, traveling, and crocheting. Rachel also manages a small clothing business alongside her pursuits.

Raphael Nnaemeka Ajima (Nigeria) currently lives in Montreal, where he's a program associate for the McGill Mastercard Foundation Transitions Project that seeks to create impact in Africa. At a young age, Raphael realized his passion for societal well-being, education, and international development. Over the past decade, he has engaged in sustainable and cross-cutting development projects that span Africa, the Americas, and Europe. Raphael was a Mastercard Foundation Scholar at McGill University, where he received a degree in international development and social entrepreneurship. In 2021, he co-founded Ahegel Technologies, a startup based in Nigeria that provides software engineering, educational medical technology solutions, including a current telemedicine project that builds on a community development initiative.

Rebecca Turyatunga (Uganda) is a feminist and the initiator of the Young Women Space, a social media space that amplifies the voices of young women and enhances their access to information and mentorship. She is also an alumna of the US Department of State's International Visitor Leadership Program.

Sandra Brew (Ghana) is a second-year student of Takoradi Technical University in Ghana, where she studies tourism management. She owns a frozen food business called SESA'S Fridge. While in senior high school, she was supported by CAMFED (Campaign for Female Education), an NGO that supports girls' education. Afterwards she was inducted into the association where she gives back by educating young people in rural communities about the importance of education and health issues. In CAMFED, she doubled up as a secretary for the members in the Central Region and on the national committee. She also served as chairperson for the Gomoa West District from 2014 to 2016. Sandra keeps plowing back to her community through philanthropic activities, such as volunteering to teach class three pupils at Abrekum D/A Basic School. While at Abrekum, together with her colleagues, she formed a girls' club and conducted home visits to check up on the girls. She mentored the girls to pass their final examinations and continue their education to senior high school.

Sharon Tarit (Kenya) is an entrepreneur with a master's degree in business administration and a bachelor's degree in agricultural extension education. Her entrepreneurial spirit was born after the onset of the COVID-19 pandemic in March 2020 after she lost her job. She used her savings to set up her first business, an online baby clothing store. Sharon also runs an apartment rental business online for travelers and is also a freelance interior designer and a YouTube content creator. She attributes her success to the rapid development of digital technologies and online platforms. She looks forward to further exploiting these digital resources to increase her businesses' sustainability and scalability.

Uwicyeza Nkaka Yvonne (Rwanda) is a journalist, writer, and radio presenter. She has created content on gender-based violence and sexual reproductive health. Through her shows, she also teaches girls about their rights and economic empowerment. She is currently a volunteer on Uwezoradio.com.

Viola Nanteza (Uganda) is a policy champion for Luweero District in central Uganda. She holds a number of leadership roles in her community. She is a female youth counselor in Nyimbwa sub-county and the chairperson for the supervisory committee of Katikamu–Nyimbwa Youth multipurpose cooperative society limited. She wants to see girls being successful in the future.

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