

The Digital Shift:

Youth Voices on Digital Inclusion and Skills

Perspectives from the Tanzania Youth Digital Summit 2020









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Video recordings of TYDS sessions can be found on DOT Tanzania's YouTube channel.

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A Letter from DOT Tanzania



COVID-19 has led to a massive digital push overnight, and has revealed the glaring digital divide, skills gap, and inequalities present in our society. As an already marginalized group, young people are some of the hardest hit by these adverse consequences. But of course, any crisis is an opportunity, and we have witnessed a growing number of young tech innovators emerge with repurposed solutions to absorb the shocks. With half of the world's population under lockdown, people have turned to the internet and technology to stay connected with one another, access education or crisis information, and maintain a limited level of economic activity.

DOT has championed digital inclusion for more than 15 years through grassroots-level empowerment in technology for livelihoods, reaching millions of youth in sub-Saharan Africa and the Middle East. DOT Tanzania trains youth to become digital ambassadors, social innovators, and community leaders who provide entrepreneurship and digital skills training to their peers through youth learning hubs and directly in the communities where they live.

Our team was quick to swing into action right from the outset of COVID-19. That culminated in the hosting of a dynamic, three-day virtual gathering: the Tanzania Youth Digital Summit (TYDS) 2020. TYDS is an annual collaboration with the ICT Commission in Tanzania, geared towards supporting digital skills development among Tanzanian youth. The event also inspired their innovation and participation in the digital ecosystem, with a particular focus on applying a gender lens to digital inclusion. Targeting an audience of 1,000 youth, DOT mobilized more than 20 partners to deliver learning sessions on ICT skills, and championed youth voices through co-design labs, consultative discussions, and workshops, all with the aim of better understanding the support they need to engage and succeed in the digital economy.

We would like to express the sincerest thanks to our partners and funders for your hard work. TYDS 2020 has been a memorable one, and has established our long-term commitment to address the challenges of the digital skills gap and internet usage for young people across Tanzania, leaving no one behind.

I am very appreciative of your assistance and look forward to continuing to work together.

Sincerely,

Diana Ninsiima Country Director, DOT Tanzania

Executive Summary:The Digital Shift

Before COVID-19, projections estimated the creation of 230 million digital jobs in Africa by 2030. Filling them requires the creation of some 650 million more training opportunities. From artificial intelligence to microwork to big data, the nature of work is changing. There is no better time to harness the energy, passion, and creativity of young people in order to create and pursue new digital opportunities and deepen the impact of the social innovations that are already changing communities.



In Tanzania, 1 million young men and women enter the job market every year. A huge challenge, but if they are equipped with the right skills and given the right opportunities they can become dynamic drivers of the industrialization agenda for 2025.

- Chloë Horne, Second Secretary, Embassy of Ireland in Tanzania

Tanzania is well-placed to take advantage of this digital transformation. There are nearly 27 million internet users across the country, representing 45% of the population. The percentage of Tanzanians with a mobile subscription is nearly double that. Mobile phones continue to be the entry point into the digital economy and account for the vast majority of how users access the internet. Further, the Government of Tanzania is preparing to launch its Digital Tanzania Programme, a 10-year initiative to improve digital ecosystems and connectivity in the country.

Paired with rising rates of internet penetration and mobile access are the ideas and resilience of young Tanzanian changemakers, hundreds of whom attended the Tanzania Youth Digital Summit 2020.

¹ COVID-19, youth employment and skills development in Africa, ITU

² Quarterly Communications Statistics, TCRA

³ Digital Tanzania Programme brief

And yet, youth, especially young women, face a multitude of challenges when it comes to capturing the opportunities of the digital economy. COVID-19 is just the latest, and a goal of TYDS was to explore the effects of the pandemic on youth-led enterprises, livelihoods, and digital skills. Gender equity and digital inclusion, two of DOT's core values, are cross-cutting themes throughout this report. Most importantly, this report amplifies youth voices, sharing the barriers they face, the aspirations they hold dear, and the ways in which DOT and other partners can better support them as they journey through the digital shift.

In "Equip," youth speak frankly about the barriers they face in accessing digital opportunities and skills—though each and every one of them share a common drive to learn. While they highlighted the importance of practical, localized skills training, "Empower" also raises the need for soft skills that will support youth in their digital shift. Mental wellness and online safety were brought up often, as well as ensuring that young women have the confidence to start and scale their businesses. One young woman said it best: the digital shift cannot only be about getting women online; we must also create a supportive environment where they feel empowered and safe to take full advantage of the opportunities present. Finally, in "Enable," youth reflect on their desire to create a digital shift that is inclusive to all, from young women to their peers to those living in rural areas.

DOT will reach out to TYDS participants three months post-summit in order to evaluate how they have applied the skills gained and actioned opportunities for their digital shifts. Combined with other youth-led co-design labs currently happening across sub-Saharan Africa and the Middle East, this report and our three-month assessment will inform Daring to Shift, the next iteration of DOT's digital skills and youth leadership training. A skills development program created to meet the unique needs of young women will also be shaped by these participatory exercises.

TYDS was a further testament to DOT's long standing belief: that young people understand the challenges faced by their communities and peers—and are the ones best placed to come forward with ideas to drive real change.

Research Methodology

This report shares the insights gained from the Tanzania Youth Digital Summit (TYDS) hosted virtually between 5-7 August 2020. The virtual event was attended by more than 450 youth from across Tanzania.

DATA COLLECTION & ANALYSIS

Data was collected in various ways. Quantitative and qualitative data was gathered before and after the summit through a participant registration survey and a post-summit evaluation survey. Both were optional for TYDS participants, and there were 82 respondents and 59 respondents, respectively. Gender disaggregated data was collected for each session.

The purpose of the surveys was to:

- Identify the ICT opportunities for youth, particularly for young women in Tanzania.
- Validate more learning, build resilience, and increase digital opportunities of participants.
- Identify and assess the impact of COVID-19 on youth-led enterprises, livelihoods, and digital skills for the future.

Analysis was conducted by the DOT team in Tanzania and Canada. Thematic findings were extracted and have been shared throughout this report. These surveys should be viewed as a snapshot of youth opinions rather than trends that are indicative of the experience of all Tanzanian youth. The majority of respondents were from major cities such as Dar es Salaam and Arusha, and this report is not representative of the experiences of young people living in rural regions.

Each TYDS session was attended by a youth notetaker. Notetakers were asked to provide an overview of the session and reflect on the energy level and engagement of presenters and participants. Notes were based on individual observation and can be considered as one young person's take on the session.

Session notes and surveys were used to inform the question line for a series of focus group discussions that occurred two weeks after TYDS. These focus groups were held virtually with 11 young women who attended the summit, and were co-facilitated by DOT teams in Tanzania and Canada. These young women are entrepreneurs, students, and employees working in the digital technology sector. Their experiences were often used to illustrate the themes that emerged through summit surveys, and their stories and quotes are woven throughout.

An additional survey will be conducted in three-months to assess the longer-term impacts of TYDS on digital learning and jobs for participants.

A NOTE ON RECOMMENDATIONS

The recommendations found throughout this report were informed by the data collected and analyzed using the methods above, as well as the recommendations made by TYDS presenters. They will help guide the creation of DOT's *Daring to Shift* program and can be used by donors to inform next steps to ensure young women are at the centre of inclusive growth in the digital economy.

Featured Youth Voices

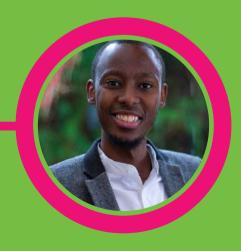
Meet some of the TYDS participants and presenters whose stories will be shared throughout this report



Elionora Didas (LinkedIn) is a project and product coordinator with FastHub Solutions Ltd., a telecommunications service provider in Dar es Salaam.

Given Edward is a software engineer and the founder and CEO of Mtabe and MyElimu. He has been recognized with several awards, including the Queen's Young Leaders Award. Given was a panellist in our youth-led fireside chat.





Collins Kimaro is the co-founder and CEO of Obuntu Hub, one of Tanzania's leading youth innovation hubs. Collins is a Global Shaper with the World Economic Forum and is passionate about building a supportive ecosystem for entrepreneurs in Tanzania. The Obuntu Hub team presented two TYDS sessions.

Doreen Michael is studying IT at Nlab Innovation Academy in Dar es Salaam. She identifies as a community changemaker and trains students in web development. Doreen is also the founder of Renotify, a digital platform that helps reduce truancy levels in schools.

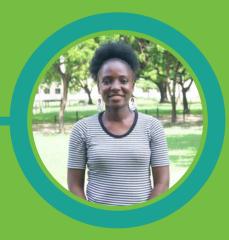




Lisa Mtaki is the owner of Lisa Spices, a specialty spice business that sells online to customers in Dar es Salaam.

Carol is a social entrepreneur and cofounder of two non-profit organizations, The Launch Pad Tanzania and Women At Web. Her campaign, "100 Tanzania Sheroes" is an initiative to inspire young women in Tanzania. Carol delivered two TYDS sessions.

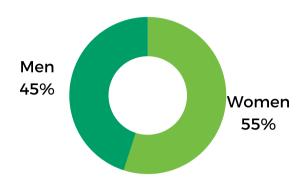




Calister is an IT and cyber security professional. She is also the co-founder of CyberJamii, a social enterprise focused on cyber security awareness in Tanzania. In April 2020, Calister founded CYBERDADA_TZ, a female-led initiative to upskill and foster a passion for IT and digital security among young girls.

About Our Participants

Participant Gender

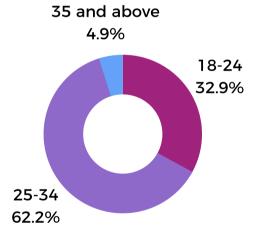




70% of TYDS attendees have completed a

have completed a university degree.

Participant Age





4 of 5 attendees

rate their level of digital literacy as very good or excellent when it comes to using mobile applications, the Microsoft Office Suite, and GSuite.



59% of participants attended TYDS using a mobile device.



41% of participants

identify a lack of awareness of online opportunities as their greatest challenge in securing a digital livelihood.

RESEARCH HIGHLIGHTS

COVID-19: Uncertainty & Opportunity

COVID-19 has affected lives and livelihoods worldwide, and Tanzania is no exception.⁴ As a safety measure against COVID-19, DOT Tanzania shifted the format of the Tanzania Youth Digital Summit—presenting the fitting opportunity to host a virtual event discussing the opportunities available in the digital economy.

YOUTH VOICES ON COVID-19

COVID-19 accelerated the shift online, but not all benefited from this digitization. This was on the mind of TYDS participants. Said one: "The effects of the pandemic have brought opportunities to those who have digital skills and access to devices, however there are those who have been left behind."

When asked about how their use of digital skills and tools had changed during the pandemic, many youth identified a need to independently find and pursue online learning opportunities using e-learning platforms like Coursera and Acumen Academy.

This was true for business owners, employees, and students alike. Many students had no other choice as universities and secondary schools were closed and classes cancelled between mid-March and the start of June.

Entrepreneurs and employees shared that they were required to spend more time than ever online. Overall, TYDS participants identified the effects of ICT on their business or digital work opportunities as overwhelmingly positive, enabling them to expand their network and customer base, generate income, market products, and find new job opportunities.

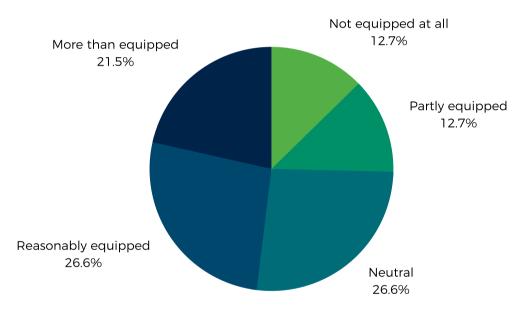
Those who reported that ICT had a negative effect were those business owners who had previously only interacted with customers face-to-face. In these cases, entrepreneurs identified their lack of an online presence as the reason they were not able to succeed during this period.

⁴ https://www2.deloitte.com/tz/en/pages/finance/articles/impact-of-covid19-on-ea-economies.html

TYDS participants were also asked how well equipped they feel to deal with the effects of COVID-19 on their business or employment. Answers were across the board. Nearly half of youth identified feeling either reasonably or overly equipped to deal with the challenges presented by the pandemic. Seventy percent of participants believe there are opportunities for work during this time.

Further, 4 out of 5 participants identified as living in Dar es Salaam and Arusha, larger urban centres with more reliable levels of internet connectivity. As a result, they may feel better equipped to deal with the effects of COVID-19 than those youth living in rural areas and working in the informal sector.

How prepared youth feel to deal with the effects of COVID-19:



Feelings of preparedness and optimism may be attributed to the fact that the majority of TYDS participants have an excellent level of digital literacy and an entrepreneurial mindset. This knowledge of digital tools and passion for problem solving may have made TYDS participants more resilient and adaptable to face the consequences of COVID-19.

A COVID-19 survey conducted by the Tanzania Startup Association reflects a similar diversity of experiences following the pandemic. While 3 out of 10 startups are experiencing growth, an alarming 42% report a severe enough decline in revenue that they will run out of capital within four months. One in 10 startups have failed to repay loans during the pandemic.

⁶TSA Snapshot Survey on the Impacts of COVID-19 Pandemic on Start-ups & Small and Medium Enterprises in Tanzania

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⁵83% identified their ability to use mobile applications as excellent or very good; 80% rated their ability to use computer applications like the Microsoft Office Suite and GSuite as falling within those two categories

97% of respondents reported being economically impacted by COVID-19.

40% experienced a loss of half of their income and 10% experienced a total loss of income.

3 of survey respondents were male, which suggests the magnitude of the gender digital divide among SMEs and entrepreneurs.

From: #COVID19TZRealities: The Economic Impact on Entrepreneurs, Startups, Small and Medium Enterprises in Tanzania, a survey conducted by The Launch Pad Tanzania & Maarifa Hub

COVID-19 & TYDS

Two TYDS sessions addressed the impacts of COVID-19 on youth, their businesses, and digital skills uptake.

In "COVID-19, Youth Livelihoods and Digital Skills for the Future," Carol Ndosi from The Launch Pad Tanzania presented the findings of a COVID-19 survey conducted alongside Maarifa Hub. It outlined the economic impacts of the pandemic on entrepreneurs, start-ups, and small and SMEs, mostly located in Dar es Salaam.⁷

A second COVID-19 session was led by Joseph Manirakiza, country director for HDIF Tanzania. The HDIF team mobilized to create the COVID-19 Challenge to support youth-led innovations that address the many challenges faced in this new norm.

Necessity is the mother of invention. The best ideas are built out of crisis, but businesses hate uncertainty.

- Joseph Manirakiza, Country Director of HDIF Tanzania





When the COVID-19 pandemic started, Lisa Mtaki turned to online platforms and digital skills to keep her business afloat. Lisa is a Dar es Salaam-based entrepreneur and owner of Lisa Spices, a business that processes and packs organic spices from different regions of Tanzania and Zanzibar. Along with adding flavour and colour to food, Lisa sells her spices as natural medical supplements to help her customers stay healthy.

Lisa said COVID-19 had both positive and negative effects on her business. While she had originally opened a spice shop to sell her products, business dropped after the lockdown began. Knowing her customers lived in urban centres, Lisa partnered with a local courier company to offer home and office delivery.

Delivery sorted, Lisa focused on finding new customers on Instagram, WhatsApp, and Facebook: "It was during this period when my sales were higher than ever before."

Lisa also took the time to learn new graphic design skills. "My social media platforms were now my shop, and I wanted them to look extra attractive," she explains. Now, Lisa posts on her Instagram and WhatsApp business accounts everyday.

⁷ #COVID19TZRealities: The Economic Impact on Entrepreneurs, Startups, Small and Medium Enterprises in Tanzania

EQUIP

Youth Engagement in the Digital Economy

There is a disconnect between youth and digital skills and opportunities.

Unpacking what was shared by TYDS participants, this section details both the interests and limitations youth have in accessing digital opportunities. It also outlines ways in which the private and public sector can create better enabling ecosystems for young digital changemakers.

Lack of awareness but a passion to learn

Lack of awareness of opportunities was identified by 41% of TYDS participants as the greatest challenge they encounter in securing a digital livelihood opportunity. Collins Kimaro, co-founder of Obuntu Hub in Arusha and a TYDS presenter, speculates this is because youth are not frequently presented with digital livelihoods that are relevant to their community and context.

He points out that international media are more likely to highlight businesses and business models that are not appropriate for the Tanzanian context because of infrastructure, the country's affordable cost of labour, low-skilled workforce, and other factors. When local businesses are publicized, they tend to be ones in the manufacturing, mining, and tourism sectors—industries that are considered more traditional than digital. "There is the gap in the middle to see how we can increase exposure to the digital opportunities that can work for us," Collins summarizes.

TYDS participants also reported facing a challenge in improving their digital skills. At registration, 63% of participants said they either did not know how to improve their digital skills or knew how to improve them but lacked the resources to do so.

Ellen Mndima, a TYDS attendee and digital marketing consultant, has seen this first hand. Ellen has completed many online courses to develop her digital skills, but said these platforms are not always known about, valued, or accessible by her peers. "There are a range of available educational sources and tools, but they are not maximized in a country like Tanzania because we depend a lot on word of mouth and seeing more physical adverts," Ellen explained. "Finding the content to learn is one thing, being able to afford to acquire the software is a whole other thing. There are definitely a lot of barriers."

And yet, these barriers are paired with a strong desire from youth to advance the skills needed to pursue digital opportunities—a testament to the energy and drive of TYDS participants. Youth identified being most interested in developing business, social entrepreneurship, and digital innovation skills.

Further, there was a strong preference for job creation versus job seeking skills. This may be attributed to the fact that DOT's programs have focused on supporting young people to lead changemaking initiatives and opportunities in their communities.

⁸Obuntu Hub is a youth innovation hub that supports young entrepreneurs through practical skills development and the creation of a supportive community.

Skills and approaches that appeal to youth

The most popular TYDS workshops highlighted the appeal of practical, interactive skills training and a desire to learn about the experiences of other young people.

The most popular workshop, for instance, was "Grow Your Business Through Social Media: Content Plan and Tips" (Obuntu Hub), a social media bootcamp where participants walked away with a suite of hands-on skills they could apply to their business.

Obuntu Hub also facilitated a second wellattended workshop called "Digital Truth: Opportunities and Challenges Facing Young Digital Entrepreneurs in Tanzania." The youth-led session featured a panel of young digital entrepreneurs working in the fields of agriculture, education, entertainment, and financial technology.

The third most popular session, "Kesho Yangu: Creating My Career Map for the Digital Era" (Bora International), focused on tangible skills and exercises such as goal setting, skills assessments, and personal reflection. When asked about ways in which they would improve TYDS, a number of youth identified a desire to attend more practical and technical sessions.

Participants identified a number of digital skills they would still like to learn. The list was extensive and diverse, including digital marketing, monitoring and evaluation, app creation, Al, data visualization, project and product management, cyber security, and website creation.

Skills to support entrepreneurship such as personal finance, networking, and corporate governance were also highlighted. These examples are perhaps a testament to the higher level of digital literacy among TYDS participants.

So how to better connect youth with digital skills? It is not that TYDS participants want to learn topics that are radically different from those desired by entrepreneurs elsewhere. Rather, they would like those topics localized to their context.

One TYDS participant, Kai Mollel, has been operating her digital communications company for four years. She has attended many online courses to build her skills, but struggles to find training tailored to a Tanzanian audience. She would like to see more local trainers supported in creating courses.

Most Popular TYDS Workshops:

- Grow Your Business Through
 Social Media: Content Plan and
 Tips (Obuntu Hub)
- Digital Truth: Opportunities and
 Challenges Facing Young Digital
 Entrepreneurs in Tanzania
 (Obuntu Hub)
- Kesho Yangu: Creating My
 Career Map for the Digital Era
 (Bora International)

"I got a lot more from the "Art of Storytelling" session (facilitated by Ona Stories) compared to what I would get from the same webinar hosted by a European or American," Kai said. "They had my context and I could easily relate to what they were saying."

Localizing digital skills training could be as simple as using locally-relevant examples. For instance, Obuntu Hub's entrepreneurship training often centres lessons around the experiences of a fictional mandazi maker. A lesson about diversifying one's business explores how an entrepreneur could add value through selling orange-flavoured mandazi; a lesson about bookkeeping is taught by factoring in the cost of the street food's ingredients. "Even if the concepts are foreign it is helping entrepreneurs to understand and contextualize them better," explains Collins Kimaro of Obuntu Hub.

Nearly half of youth who attended TYDS said they will use the information gained at the summit to explore new digital opportunities, start an online business, or learn digital skills. Three quarters of participants said they had added value to the skills and knowledge that they already have.

Digital technology is not a waste of time

Just as there is a lack of knowledge pertaining to digital opportunities and skills, awareness-raising must be conducted to ensure that people, young and old, understand the full potential of digital technology.

Youth working in tech fields explained that friends and family often thought they did nothing but take photos and post on social media all day—a frustrating error that can discourage youth from pursuing further opportunities.

This belief was confirmed by Kai, the TYDS participant who manages her own digital communications company: "My family is completely analogue so it took them some time to really understand what I am doing. They would say 'she is playing with her hobby. She needs to get serious with her life." Another participant shared a similar experience, explaining that since she started her digital marketing consultancy business her parents are still hoping she is applying for jobs. Despite her efforts to register and pursue the business full-time, it is still being treated as a side gig.

A greater awareness of digital technology may be especially beneficial for young women. A goal of Women At Web, one of the organizations present at TYDS, is to increase the participation and resilience of women on the internet.

Resilience involves the ability for women to benefit from being online and use the space positively. "Everything has been connected in one way or another with technology," says Asha Abinallah, Women At Web's co-founder. "We are trying hard to explain that it is very important for a person to have a presence online, so we are promoting digital literacy and citizenship for women."

 $^{^{9}}$ Mandazi is a fried doughnut and popular street food in Tanzania and Kenya.

Participant Spotlight: Martha John

LinkedIn | Company website

For many TYDS participants, COVID-19 has raised general awareness about the importance of online platforms and digital skills.

Take Martha John, digital product manager at FastHub Solutions Ltd., a telecommunications company in Dar es Salaam. Working in the role for three years, Martha says her parents and friends had never quite grasped the scope of her work.

"As a woman it is really, really hard for people to take you seriously. A lot of people look at you and think you're not doing the job because they think digital technology is just social media posting, but it's actually beyond that," Martha shared.

The pandemic has led to more people appreciating her unique skill set: "People were emailing and calling me saying 'we do not know how to organize our business, conduct meetings online, or fully utilize our social media platforms.' These were the same people who did not understand what my job required me to do, and now they needed digital technology as support."



Working in the technology and digital sector, the FastHub team was already accustomed to using tools like Skype, Zoom, Google Meet, and more.

This familiarity and use of digital tools allowed FastHub Solutions to handle its transition in operations when the pandemic began. "Customers were requesting our bulk SMS services and other services which can help them reach and educate their customers on how to protect themselves during the pandemic," Martha said. "It was a very good opportunity for us to adjust and learn more."

Already working in tech, Martha was at first uncertain of what she had to gain from attending TYDS. "I learn every single day—it is in my job description!" Martha explained. "But I was shocked to find out that Tanzanians are embracing more on digital technology. So many jobs now have a digital influence."

The many benefits of e-commerce

Africa's e-commerce market is projected to reach US \$29 billion by 2022, nearly double the market value from five years earlier. Nigeria, South Africa, and Kenya account for more than half of the continent's online shoppers, but there is huge potential for e-commerce in Tanzania, especially in response to COVID-19.

TYDS participants who run online businesses are well aware of the opportunities when compared to managing a physical storefront. Efforts should be made to share those benefits with youth who are apprehensive to start a digital business.

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¹⁰The Asian Banker, 2020

For youth, and young women in particular, TYDS participants believe that e-commerce presents a lower barrier of entry when compared to starting a physical business. This connects to three factors: affordability, inclusivity, and business model validation.

Affordability:

Online businesses can be started with little or no capital, a positive factor especially with less financial products tailored to youth. There was the belief that a digital business could be launched with as little as an idea and an Instagram account.

Inclusivity:

Female business owners are often constrained by traditional gender norms. One focus group participant explained how many women still need permission from their husbands to run errands and leave the home. Requiring only a phone, there is the perception that online businesses are more realistic for women because they can be run within one's home. Youth shared that female-led enterprises can be pursued while a woman navigates the many expectations put on her day.

Validation of business model:

Start where you are and explore ideas from there. This was a sentiment expressed by TYDS participants who identified that online businesses allow entrepreneurs to test many business types at once to see which one resonates with the market. Tools like WhatsApp and Instagram also increase the two-way flow of information between entrepreneurs and customers. This allows for ongoing marketing and customer feedback, something that is not as easy for physical businesses.

Strengthening enabling ecosystems for the digital economy

A thriving digital economy relies on engagement with the public, private, and educational sectors. It also demands agility so that policies can keep pace with the rapidly changing digital landscape. Considerable efforts have been made by stakeholders, and the presence of more than 20 diverse partners at TYDS was one indicator of the growth in Dar es Salaam's digital ecosystem.

And yet, in her session "COVID-19, Youth Livelihoods, and Digital Skills for the Future." Carol Ndosi of The Launch Pad Tanzania offered the reminder that Tanzania is "still missing a defined ecosystem to provide youth with a clear pathway of how they can arrive at the digital economy."

It is not enough for youth to learn digital skills if those skills are not in demand or valued by employers, particularly those outside of traditional ICT-supported industries. Digitalization is needed across the board, and this could start in the six priority sectors identified by Tanzania's National Development Strategy: ICT, tourism, transport and logistics, construction, agriculture, and engineering.



66 Creating a supply of youth who can offer digital skills also depends on creating a demand for those skills in the main sectors.

- Carol Ndosi. The Launch Pad Tanzania

Carol challenged these sectors to embrace the digital transformation and recognize digital skills as a prerequisite for employment. This demand should, in turn, be reflected in an increased emphasis on digital skills training at primary and secondary school, university, and vocational institute levels. Employers should also be willing to pay for digital skills upgrading for youth already in the workforce.

Where Tanzania falls short is in its regulatory and policy support for young entrepreneurs. Youth identified the need for urgent change in national policies. Independent entrepreneurs and startups alike are required to go through the same business registration process as large companies, a barrier to entry for many young entrepreneurs.

Youth shared that this can be a complicated and time-consuming process, and one that can hinder the attractiveness of shifting one's business from the informal to formal economy.

Collins Kimaro, founder of Obuntu Hub, says Tanzania could benefit from the creation of a Startup Act similar to what was implemented in Tunisia and Senegal in 2018 and 2019 respectively.

Rwanda recently became the first country in East Africa to explore the implementation of a Startup Act, and similar pieces of legislation are reportedly being explored in nearly 20 other African Nations. Collins highlights the recent creation of the Tanzanian Startup Association as a step forward, and an aim

of the member-based group will be to lobby and advocate for the creation of a more nurturing startup ecosystem.¹²

Digital businesses need digitallysavvy customers

Online businesses can only be successful if consumers know how to access that product and trust what is on offer. That is still a challenge in Tanzania where creating a grocery delivery app, for instance, is not enough if customers do not have a smartphone, internet access, or are unfamiliar with the process of ordering products online.

Additionally, TYDS participants shared that it is more difficult to build trust and rapport between online businesses and customers. "If you have a physical shop or office then people trust that there are others to regulate you. With an online business you do not have that," said one attendee.

"I have seen that because I am advertising online and because I do not put my picture on the networks where I advertise, it is difficult for people to have that connection with me and my business," added Dina Dabo, who recently started an online company called Tanzania Facilitation Services, which provides human resource services, virtual assistance and environmental research consultancy. "If I had been meeting people face-to-face they would have accepted and agreed to talk about the services that I provide more than they do now."

¹² Tanzania Startup Association

¹¹ Disrupt Africa, 2020

As a result, youth depend on their networks to spread the word about their online business. Still, many find that an introduction, often in-person, is necessary before a customer will start to trust the business. Consumer education and awareness around online businesses would be beneficial in addressing both.

RECOMMENDATIONS

Digital Skills & Opportunities:

- Showcase more Tanzanian digital entrepreneurs and business owners as a way to highlight the locally-relevant opportunities that are available in the country.
- Share materials and notes with participants after summit events and notify attendees of where they can watch session recordings.
- Create digital skills training programs that focus on practical skills development and incorporate more local context. Training programs should be youth-led, when possible.
- Awareness raising activities must be conducted to broaden public understanding of the uses of digital technology and the opportunities available in the digital economy. Similarly, consumer education campaigns must be created to improve the adoption and readiness of markets for online business.
- Continue to track the impacts of COVID-19 on youth-led enterprises. In the interim, increase training that supports entrepreneurs in the transition from offline to online business.

Enabling Ecosystems:

- Increase collaboration between industry, government, and educational institutes to close the gap between the demand for digital skills and the supply of talented graduates who can fill those positions.
- Echoing the recommendations of the Tanzania Startup Association, provide a corporate tax break for SMEs to reduce the number of businesses that will be forced to close during the pandemic.
- Lobby for digitalization in all sectors of Tanzania's economy, especially the six priority sectors of the National Development Strategy.
- Streamline Tanzania's business licensing process and provide greater guidance to young entrepreneurs and startups as they go through registration.
- Advocate for national legislative change to create a more supportive environment for young entrepreneurs. Begin the process of creating a Startup Act in line with other African nations.

EMPOWER

Skills to Support the Digital Shift

Increasing the ability for young people to access digital opportunities requires an exploration of the soft skills that support that shift.

It requires mindset shifts where youth feel empowered to take advantage of these opportunities, and an understanding of how to engage in online spaces in a positive and healthy way. These are a few of the themes explored in this next section.

More attention must be paid to mental health and wellbeing

The amount of time we are spending online can be detrimental to our mental wellness. That was a message of the "Building Resilience and Mental Wellness Online" session delivered by Araika Zawadhafsa Mkulo, founder of Safe Space Group and a cognitive psychologist. While the opportunities presented in the digital economy are great, Araika spoke of the importance of digital responsibility and self-awareness to reduce the dangers that can come with too much time spent online.

This message resonated with TYDS participants. "I never knew it was very important to take time off social media and engage in actual physical outdoor activities," said Elionora Didas, who attended Araika's session. Elionora works online all day in her role as a project and product coordinator with a Dar es Salaambased telecommunications company. After the summit, Elionora decided to apply some of the tactics Araika had shared: "I switched off my phone and all other digital

devices for three hours and went for a walk without music. It felt soothing and very refreshing. I was able to pay more attention to the things around me and actually noticed a whole lot that I was missing."

Elionora was not alone in her thoughts. The importance of mental wellness was raised on a number of occasions during post-summit focus group discussions. The Safe Space presentation and another delivered by Women At Web ("Women and Online Presence" with Asha Abinallah) were named as two of the most helpful sessions for young female participants.



Most of Tanzanian society is not used to the fact that mental wellness is something very important, for all genders and especially for youth. It matters a lot because it is the make or break of a person.

- Elionora Didas, TYDS participant

Doreen Michael also attended the Safe Space presentation. Like Elionora, Doreen was not fully aware of the mental health toll that could come with the 15+ hours she spends online each day. An 18-year-old IT student and social entrepreneur, she explained she sometimes finds herself a "cyber-zombie" by day's end. Doreen has also adopted the strategies Araika suggested, including to stay offline on the weekend and to meditate.

Doreen has also scheduled an appointment with Safe Space to further discuss the importance of mental health. "I actually never knew I had mental health issues until I attended the DOT session and met with Araika," Doreen explained. "These are things that have benefited me from the summit"

Youth want more training on online safety and cybersecurity

Closely interlinked to mental wellness is the ability for youth to feel safe online. TYDS participants expressed a concern for the lack of information that exists around what one should and should not share online. Young women said the main opportunity they have to learn these lessons is by watching someone else make a mistake.

"That should not be how you learn about this," said Ellen Mndima, a TYDS participant. "Nobody is telling us, 'this is the boundary right here.' Or saying 'you are empowered and you can do all these things online, but you also need to be safe about it.""

Cyberbullying and online harassment are two of the main factors that hinder online participation for women. In some instances young people do not realize they are being harassed or that they themselves are the harassers.

Doreen Michael said she has felt unwelcome online many times. As someone who considers herself more reserved, she says it can be difficult when her peers assume popularity based on one's social media following.

Staying Safe Online 101

Shared during the "Fundamentals of Cyber-Security and Being Safe Online" session hosted by Bob Kevin Shoo, cyber-security expert and an Arusha Global Shaper.

- Check your privacy settings to control who sees your photos, posts, and information.
- Use a Virtual Private Network (VPN) to conceal your IP address.
- Create social media accounts using a secondary email address.
- Remember your digital footprint: whatever you post online leaves a lasting mark visible by prospective employers and contacts.

"If you have less than 500 followers you are weird at our age," Doreen disclosed. "This is me speaking as a teen." In some cases this bullying can lead to youth quitting social media altogether.

During her session "Women and Online Presence," Asha Abinallah reminded participants that, if left unchecked, the issues that disproportionately affect women offline can carry over into the online world. This includes harassment, limiting gender stereotypes, and cultural norms.

While training explicitly addressing online safety and cyberbullying could proactively combat many of the issues raised by TYDS participants, the onus should not be on women to change their behaviour. There was acknowledgement at the summit that all parties must work together to make the internet a safer space for all.

Disempowering mindsets can carry over into the digital world:

"As women we have challenges in the offline world and no one is changing our mindset to think they do not exist online. We take online these beliefs that we are limited or cannot open doors that men can open."

- TYDS participant

Shifted mindsets take many forms

A greater understanding of digital opportunities was the main takeaway reported by TYDS participants. But leaving the summit feeling more inspired, motivated, or informed was the second greatest takeaway, revealing the lasting impact of mindset shifts and personal development.

The young women who participated in the post-summit focus groups said that TYDS presented an opportunity to begin rewriting and challenging some of their own expectations and doubts.

"For me the biggest challenge is being 100% confident in the value I can provide or add to my business at all times," shared Dina Dabo. "Often I find myself hesitating, especially at the beginning. [...] I feel like if I were a man, the outlook and expectations from society would have socialized me into having more confidence in what value I bring to my business. It really is a personal challenge that I am still trying to work on."

Another focus group participant, Ellen Mndima, felt that cultural expectations of likeability also affect the way women do business: "[We as women] are very dependent on trying to make customers like us by putting our value a little lower so we are acceptable in the community. When we look at how men run their business it is more likely to be 'this is our value, you pay for it or you go to someone who can do the work for cheaper.' I found that mentality very interesting."

Both Dina and Ellen shared that they walked away from the TYDS sessions

feeling more empowered and certain of the value that their digital businesses can bring to clients and their communities. Other youth report having learned the role that ongoing learning, frequent failure, and collaboration have when it comes to being resilient in the digital economy.

DOT's programming has long recognized the importance of soft skills development as a way to complement digital and business skills training. Young women in particular have always shared the value they see in these secondary support skills, and this was consistent with what was shared by TYDS participants. Daring to Shift (D2S), DOT's new four-year program funded by the Government of Canada, continues to support young women as they build more resilient, equitable, and inclusive communities—and gain the confidence to take advantage of opportunities in the digital economy. D2S represents DOT's ongoing commitment to gender inclusivity, and young women will represent 70% of all program participants. Further, the insights shared by TYDS participants will be used to codesign the training program for D2S.

Youth want to come together physically and virtually

While hosting a physical event was not possible due to COVID-19, participants shared that they were still able to network, even if that looked a little differently than usual. Forty percent of youth reported feeling as though they had gained a new network of peers through the summit.

Participants shifted their networking online, using social media to connect with other attendees and presenters. "The summit was the period to be in the presence of women doing some amazing things, to exchange ideas and takeaways," said Calister Apollonary Simba, an IT and cyber security professional.

Several participants reached out directly to presenters during their session, requesting mentorship and support after the summit finished. The presenters were willing to connect in all cases, and several shared their contact information and social media handles with participants.

While networking was possible as part of the virtual summit, participants expressed a desire to attend in-person events. This would not only enable greater exchange between participants and presenters, but would also reduce the attendance barriers of hosting an online event.

For example, some youth said it was challenging to maintain their network connection while moving around throughout the day; others said it was difficult to focus while in the office, at home, or at school. The consensus was that a physical summit would allow for more interaction and learning.

RECOMMENDATIONS

- Conduct more online safety training so young women and men do not need to learn the hard way when their peers make mistakes. This must include lessons on cyberbullying and online harassment, especially for those under the age of 25.
- Ensure young people understand the importance of logging off and shutting down, especially when they are working in the digital economy. Conversations about mental health and wellbeing should be incorporated into more workplaces and educational institutes.
- Programs must still focus on youth empowerment and soft skills development, in addition to technical training. Youth cannot reach their full potential within the digital economy if they do not receive support around mental health and confidence building
- Young people want a place where they can discuss summit sessions and share experiences and ideas. There would be value in creating a Facebook group or other digital platform where participants can connect beyond the length of any one event.

ENABLE

Inclusive Growth and Bridging the Gender Digital Divide

At a global scale, an estimated 327 million fewer women than men have mobile internet access.¹³

In Africa, women are 34% less likely than men to own a smartphone. Research has found that the gender gap in internet usage has actually widened across the continent since 2013.

When Tanzania's ICT Commission set out to survey people as part of its National Framework of ICT Skills Development, it aspired to speak with as many women as men. This proved challenging: "we undertook a survey of 1,000 people and women did not reach 20%. That was a disappointment," said Jasson Ndanguzi, who presented on behalf of the ICT Commission at TYDS. "We were thinking, how can we reach these women?"

This context set a clear call to action for TYDS: ensure young women have the skills, confidence, and support to take full advantage of the opportunities presented in the digital economy—and to ensure that the gender gaps that exist in phone ownership, internet access, social media usage, and beyond do not continue to affect a woman's ability to engage in these economic opportunities.

Highlighting more gender-inclusive leadership

It is not always about which skills are taught—it can also be about who is doing the training. One way to support women in their pursuit of digital opportunities is to introduce other women who have forged

their way in male-dominated fields. That includes the tech sector.

TYDS participant Calister Apollonary Simba was first exposed to digital skills in secondary school. Her teacher was another woman, not that many years older than herself. Calister said she left the class feeling more motivated and inspired than she would have been if taught by an older male instructor.

So much more than classroom instruction, Calister said the female teacher also supported her in overcoming some of the barriers she faced at home. When Calister shared that she was the first in her family to learn about ICT and explained that she did not have a computer at home, the teacher encouraged her to practice her new skills in an internet cafe. When her grandmother questioned her desire to enrol in a science or telecommunication engineering program, the female teacher was again there for support.

Today, Calister promotes digital skills adoption for young girls in rural Tanzania through CYBERDADA_TZ, an initiative she created in April 2020. That initiative currently works with 50 girls, helping them to become more aware and safe in the digital world. When these girls have moments of doubt or need support, Calister often adopts the same strategies taught by her teacher in secondary school, proof of the ripple effect of female leadership.

¹³The Mobile Gender Gap Report 2018, GSMA

¹⁴Bridging the Digital Gender Divide, OECD

Participant Spotlight: Doreen Michael

LinkedIn | Twitter

Doreen Michael has come a long way since she first joined her secondary school's computer club. The 18-year-old is studying IT at Nlab Innovation Academy in Dar es Salaam and is the founder of Renotify, a digital startup that helps reduce school truancy.

All of the ICT teachers at her secondary school were men. It was not until the computer club introduced organizations like Apps and Girls, Code Like A Girl, and the Tanzania Data Lab (dlab) that Doreen came across another woman working in ICT.

"It was life-changing when I first met a woman in tech and she was the CEO of her own organization," Doreen shared. "I did not know they existed. [Meeting her] empowered me and made me more comfortable."



Now Doreen is showing her peers that it is possible to blaze one's own path in tech. In addition to her IT studies and work as a social innovator, Doreen volunteers to train students in web development, IT, and basic entrepreneurship skills.

She said her age makes it easier to connect with her Generation Z peers because they view her as a friend rather than a teacher.

"When I mention I am 18 they are really awestruck," Doreen said. "They say 'she is doing it. She is our age and she is volunteering to teach us.' I have got many girls engaged in tech and ICT, and it is really special. I personally know the impact of women to other women in tech."

Digital inclusion efforts for rural communities and youth

Just as gender-inclusive programming was discussed, so too was digital inclusion in the context of rural communities and young people.

The majority of TYDS participants came from larger and mid-size urban centres such as Dar es Salaam, Arusha, and Morogoro. The online-only nature of this year's summit prompted participants to reflect on how to better reach rural communities with the knowledge shared.

Further conversation was focused on how to ensure rural youth do not get left behind in the accelerated digital adoption that has occurred in response to COVID-19.

TYDS participants shared that more could have been done sooner to advertise and engage a larger audience of university students. They also suggested that, as with the first TYDS summit, the DOT Tanzania team and other partners could visit universities and colleges directly to reach more students. This feedback reflects a desire of youth to share what they have learned with their peers.

Panellist Spotlight: Given Edward

LinkedIn | Twitter | Website

To Given Edward, digital innovation is about understanding the realities of your users and building solutions from there. Given is a software engineer and founder of Mtabe, an offline e-learning platform for students who do not have access to internet, textbooks, or smartphones.

The turning point for the Mtabe team was learning that only 4 out of 10 people in Africa have internet access. Given had seen this first-hand while visiting rural schools; young people had a desire to learn and were naturally inquisitive but lacked internet access and digital literacy skills.

In these communities, digital inclusion demanded more than providing students the latest gadgets, an approach many organizations had tried in the past. "You are introducing a laptop to someone who does not understand English, or a person who does not know how to use it," Given said. "Context matters and a good innovation is one that uses the technology which people already have, can afford, and know how to use."

That is why Mtabe uses offline SMS technology accessible on the most basic of feature phones. Feature phone ownership is much more common in rural Tanzanian communities. Users—currently secondary school students—send a simple SMS message to the platform (i.e. "when did the First World War start?") and the platform replies with the answer. Students also receive a list of recommended questions to help further broaden their knowledge.

Mtabe's business model involves a low-cost monthly subscription: for 1,800 Tanzanian



shillings (about USD \$0.60), students can send the platform an unlimited number of questions in either English or Swahili. Users have reported that the tool has helped them reach the top 10 in their class and perform better on exams.

Though Mtabe users see a basic interface, the backend is powered by artificial intelligence. Mtabe employs a team of teachers to answer users and train the system, meaning it gets faster and smarter with every question. Today, about 67% of questions can be answered automatically and within seconds by the system itself.

"I am personally very excited about [the incorporation of AI] because it shows you can use complex tech to help kids who do not even know what is happening behind the scenes," Given said.

Given and the team are hoping to expand in the next six months to reach primary school students. A new partnership with WhatsApp will mean the platform is available via that platform in addition to SMS. The Dar es Salaam-based team is also on the lookout for new partners.

Ultimately, digitizing rural communities will benefit everyone. "If we can make elearning inclusive then we can do a lot more as a society," Given explained. "What if the cure for cancer is in the mind of a student who cannot afford education or the internet? We are not only stealing kids' dreams, but we are stripping the world of the potential of those dreams."

One focus group participant said she appreciated that TYDS had no minimum age. She shared that she has been excluded from training and conferences in the past because she was under the age of 18. Minimum age requirements for National IDs can also limit the involvement of young people in the digital economy as identification is needed for youth to purchase a sim card.

Faraja Nyalandu, executive director of Shule Direct, suggested that parents, teachers, and guardians could improve digital inclusivity by lending young people their phones and allowing them to access information and opportunities that could help them get online. One in 10 participants expressed a newfound motivation to incorporate greater digital inclusion measures in their businesses. They did not offer specifics when it came to these actions, and more research is needed to understand how youth plan to make their initiatives more inclusive.

Microwork can bridge the digital divide

With its ability to pair workers with paid virtual jobs, microwork has the potential to be a catalyst for women's economic empowerment in Tanzania and across the developing world. Interestingly, despite the gender gap in internet access, Tanzanian women are more than three times as likely to be engaged in microwork than men. Nearly three-quarters of microworkers in Tanzania have a secondary school certificate or primary education, making microwork more accessible than other

digital jobs for those whose educational opportunities may have been limited.

However, these opportunities remain highly nascent in Tanzania; microworkers represent less than 1% of all internet users. With few initiatives focused on expanding microwork opportunities, there is huge potential for growth.

Microwork receives brief mention in the Government of Tanzania's new Digital Tanzania Programme. Financed by the World Bank, phase one runs from 2020-2024 and lists supporting microwork opportunities for youth as one of its key activities. This could include the digitization of government records and registries.¹⁶

The TYDS plenary session on digital jobs highlighted many opportunities available for participants, including those that could be classified as microwork: from voiceovers to proof-reading, media monitoring to online research. A greater knowledge of microwork was not explicitly referenced by TYDS participants, though could be what youth had in mind when they reported learning about new digital opportunities.

What is Microwork?

A series of small tasks which together comprise a large unified project, and are completed by many people over the internet.

This can include tasks such as photo tagging, data verification, translation, market research, and more.

What is the State of Microwork in Africa?,

Research ICT Africa
The World Bank, 2018

The ripple effect of youth empowerment

Finally, young leaders are keen to share their learnings and experiences with their peers. TYDS participants were asked what new actions they planned to take based on the information gained at the summit. One in 4 youth expressed the desire to improve their community and train or motivate their peers. Said one participant: "As an IT student I now better know how to use my skills for innovation and changemaking in my community."

The desire to lead community change was also evident among focus group participants. Though COVID-19 affected her plans to conduct ICT training in rural schools, Calister Apollonary Simba said she created WhatsApp groups and online webinars where girls could network and access mentors. In non-pandemic times she has also helped girls in rural areas gain better access to laptops and computers, renting from friends when necessary.



I was really encouraged and inspired to see other women in the summit who are like me but are also doing a lot to help their community.

- Judith Mbayuwayu, TYDS participant and master's student at the University of Dar es Salaam

TYDS presenters also stressed the need for youth to identify the social challenges that exist in their lives and communities, and the ability of technology and digital skills to address them. The message was that youth are the ones best equipped to create sustainable, digitally-driven solutions for their own communities.

RECOMMENDATIONS

- Create strong networks of women supporting women. Highlight female-led social enterprises and business women, especially in the tech space. Share platforms that allow women to exchange experiences and encouragement.
- Promote programs that connect young women with mentors, male and female. This will help young women feel supported as they pursue digital opportunities.
- Avoid setting a minimum age for summit and training events.
- Consider ways to make online-training accessible to those who lack internet or technology access. This could mean offering more in-person training, translating content into Swahili, or creating audio-only sessions for radio broadcast.
- Conduct further research into the ICT microwork opportunities that interest youth and are most applicable to the Tanzanian context.
- Recognize the inherent desire of youth to empower other youth. Support and foster this ripple effect.

Conclusion: Co-designing the Path Forward

So many digital opportunities exist and so many more are yet to be created.

COVID-19 has accelerated the digital shift more than any of us could have ever imagined. Young women and men are leading the charge in this fourth industrial revolution, and it is the responsibility and imperative of DOT and other partners to ensure they are equipped, empowered, and enabled for the shift.

Though they come from different backgrounds and age groups, each TYDS participant demonstrates the adaptability, zest to learn, and passion needed to upskill and pursue opportunities in the digital economy. These digital skills are already being used to broaden and deepen social impact in their own communities.

Further learning is needed to understand the ways in which DOT and Daring to Shift can best support young leaders, and in particular young women, to reach their peers in rural communities. Until then, the voices shared in this report represent a snapshot of the aspirations, challenges, and ideas of young people in Tanzania's urban centres—millions of whom are also ready to lead change.

DOT will reach out to TYDS participants three months post-summit in order to evaluate how they have applied the skills gained and actioned opportunities for their digital shifts. Combined with other youth-led co-design labs currently happening across sub-Saharan Africa and the Middle East, this report and our three-month assessment will inform the next iteration of DOT's digital skills and youth leadership training. A skills development program created to meet the unique needs of young women will also be shaped by these participatory exercises.

We look forward to continuing to learn from these youth and following their lead.



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