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GIRLS IN ICT GLOBAL DIALOGUE
APRIL 28, 2022
1400 CET

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>> DOREEN BOGDAN MARTIN: Good afternoon from Geneva, dear colleagues, future colleagues, friends. Welcome to the Global Celebration of Girls in ICT Day. Thank you so much for being here with us. And also, a big thanks to the WSIS Forum and the team for hosting this Global Dialogue today. I'm Doreen Bogdan Martin, and I'm the Director of the ITU's Telecommunications Development Bureau. And today I am joined by my co-moderator, Anaelle. And now I'm going to hand the floor to her.

>> ANAELLE CATHELINEAU: Hello. I'm Anaelle Cathelineau. I'm 19 years old and was Deputy Secretary-General for the Futurecasters Global Visionaries Youth Summit. Before we begin, we would like to invite you to watch the WSIS Forum 2022 video that will be played by the WSIS team while we wait for other participants to join us.

(Music)

>> You are muted.

>> DOREEN BOGDAN MARTIN: Can we try again?

>> Yep, it's fine now.

>> ANAELLE CATHELINEAU: Is it okay now?

>> DOREEN BOGDAN MARTIN: Yep.

>> ANAELLE CATHELINEAU: So, for this session, we would like to give you some guidelines. Please note that during the session, attendees' microphones are muted. Please raise your hand. The raise hand function is located at the bottom of the participant window. Once given the floor, the moderator will unmute your microphone. Once done intervening, please mute your microphone.

We will take comments and written questions through the Q&A and chat. You can access the chat and Q&A by clicking the relevant buttons in the bottom bar of the Zoom interface.

The meeting is being live-streamed and recorded. The recording will be available on the event page of the WSIS Forum 2022 website soon after the end of the session.

So, the dialogue is structured in four five side discussions. The moderators will pose two questions to each panelist in two rounds. Panelists will have 1 minute and 30 seconds to answer each question. To allow the program to run smoothly, a timer will be used to keep time. We ask all panelists to keep their answers focused and no longer than the allocated time.

>> DOREEN BOGDAN MARTIN: Ladies and gentlemen, over the past decade, Girls in ICT Day has been celebrated in nearly every country around the world, with thousands of events and activities in an effort to bridge the digital and STEM gender divides and to empower girls to study and pursue careers in STEM -- science, technology, engineering, and mathematics. The world desperately needs more women and girls to bring their perspectives to STEM fields so that science and technology evolves in a way that benefits all.

>> ANAELLE CATHELINEAU: At this virtual global dialogue, we hope to amplify women's powerful voices by highlighting the accomplishments of wonderful women already working in STEM and to inspire future STEM and ICT leaders.

Today, around the world, other events and celebrations are being organized by ICT regional offices, by partners, by stakeholders, and by young women, themselves, to show the world what girls in ICTs can do. For the first time, Girls in ICTs has a new theme. For 2022, we are focusing on access and safety, because to tap into the rich opportunities that STEM studies and careers can offer, it is crucial that every girl and woman feels safe and empowered to take part online.

>> DOREEN BOGDAN MARTIN: Thank you, again, everyone, for joining us at this Global Dialogue today. And as we get into our discussions, I wanted to share a few framing statistics from our panelists today -- for our panelists today, as I should say, as they consider their inputs to our discussions.

So, today, less than 30% of STEM professionals are women. And of course, when we look at spaces like artificial intelligence, that number is significantly lower. Globally, in tertiary institutions, approximately half the number of girls are studying STEM subjects compared to the number of boys. What do these numbers mean in reality? What do they mean for girls today who dream of futures in STEM? What do these numbers mean for you?

Amplifying the voices of young people is a key focus at the ITU. That's why Girls in ICT Day 2022, our young ITU staff members undertook a consultation. They undertook a consultation with girls to see what challenges and barriers they face in the ICT and STEM studies and careers and what they think should be done about them. Focusing on the 2022 Girls in ICT theme of access and safety, girls actually share their experiences, and they highlighted some of the key areas that still need work. Four of these focus areas will be discussed in our dialogue session here today.

To reinforce the importance of access and safety, have a look at the results on your screen of an ITU Twitter survey that was taken last week, in which we asked girls and women -- women in tech -- to identify their most important success factors. As you can see, access and safety were at the top of those results.

>> ANAELLE CATHELINEAU: A message that was repeated by young people is that at events, like this one, it is important that girls and young women are more than observers, but they are also active participants in the dialogue. That's why we are making sure that our young women are being included in each section of our dialogue here today. But also, I am a young person, myself, and I am co-moderating this session with Doreen, and it is particularly empowering for me. This is yet another instance that I feel my voice as a young woman is being heard, and I hope this event will inspire you as you hear women from all around the world from different sectors share their experiences with ICTs.

>> DOREEN BOGDAN MARTIN: Engaging with young women who have faced and overcome challenges in STEM and partnering with them to co-develop solutions is at the core of empowering young people,

empowering them to be leaders and designers of a digital future. We need their critical and innovative thinking and their firsthand experience to help ensure that tomorrow's Internet is a safe space for all.

>> ANAELLE CATHELINEAU: Our first fireside conversation today is focused on equal access and what it means to connect the unconnected. Worldwide, women are less likely to have access to the transformative power of the Internet. The latest estimates from ITU suggest that women globally are 12% less likely than men to use the Internet and also highlights that this gap is most pronounced in least developed countries, where women are 33% less likely to use the Internet.

For girls to study STEM, they need access to the information services, education, and opportunities that the Internet can bring. It is critical that we address this digital gender gap and ensure women are not being left behind.

>> DOREEN BOGDAN MARTIN: We're very fortunate to welcome three distinguished panelists to discuss this topic in more detail. And I'm very excited to introduce my friend and colleague, Claire Sibthorpe, who is the Head of Digital Inclusion in the Mobile for Development team at the GSMA; Sophiyat Sadiq, who I was just with in another event. She is one of our Generation Connect Africa Youth Envoys and is also a Kofi Annan Changemaker. We also have with us Syeda Shafaq Karim, who is the Director of Wireless and the Head of the Committee on Gender Inclusion in ICTs of the Pakistan Telecommunication Authority.

>> ANAELLE CATHELINEAU: So, let us start the first fireside discussion with Claire. So, as we know, there is still a large gap in access to connectivity, especially for girls and women. What are the positive effects of increasing women's access to mobile networks? Why is this a part of decreasing the gender digital divide and why is it so crucial? Claire, you have the floor.

>> CLAIRE SIBTHORPE: Thanks. Thanks for the opportunity to speak here. I was not surprised when I saw the statistics you just showed, that access is a key barrier. Obviously, if you don't have access to the Internet and technology, how could you work in this space? It makes it very difficult, yeah.

But as you say, there's a big gender gap. And I think, just before I go into the benefits, just to highlight that it's large, but it's also -- we're seeing that COVID is impacting on it. In fact, our latest research that we're publishing in June says that, unlike in previous years where this very substantial gender gap in mobile Internet use has been improving, progress is now stalled in low and middle-income countries, and in some countries, that gap is increasing, which is worrying and highlights that women have been disproportionately negatively impacted by COVID. So, it is absolutely critical that we continue to focus on this issue.

And you asked why it's important. I mean, as I say, women and girls have been, in particular, have been disproportionately negatively impacted by the pandemic, and Mobile has provided them with a means to mitigate many of these negative impacts. It's enabled them to go online to access information, education, and income-generating opportunities. And we've done quite a bit of research in this area.

So, more generally, we see that mobiles and mobile Internet, in particular, is valued by women as tools that enhance their lives. It makes them feel safer. So, there are safety concerns, but Internet access makes women feel safer, more autonomous, more connected, and it helps them in their day-to-day life, including their studies and their work. And it provides access to information

that they report they would not have, you know, otherwise would be hard to get.

So, what we know is, the reality is that when women and girls thrive, society and businesses and economies thrive. So, we really do need to address this gap to ensure that women and girls aren't being left behind. We are living in an increasingly connected world, and if we don't address this gap, then some of those existing inequalities will be further exacerbated, so it's absolutely critical that we tackle it. Thanks.

>> ANAELLE CATHELINEAU: Thank you, Claire, for stressing the importance of this issue. Let me now ask Sophiyat, as a Generation Connect Youth Envoy and a Kofi Annan Changemaker, you've had the opportunity to connect with many young people from around the world. What does technology allow you to do? How has technology really empowered you to follow your dream?

>> SOPHIYAT SADIQ: The first thing I do have to say is that the only reason that I'm in Generations Connect Youth Envoy or Kofi Annan Changemaker is because of technology. As a young person constantly seeking opportunities in how to grow myself, having the opportunity to even be part of a network like Generations Connect was only possible because of technology. Technology is the reason that I can dream of a different future for myself.

I saw the application online because I had access to the Internet. There's currently 10 million girls in Nigeria alone who do not have this access. 129 million girls around the world who, I'm hurry, are perfect fits for the Generations Connect Youth Envoy program, but cannot be a part of it because they have no access to the Internet, no access online, and no access to digital technology. So, I am only able to be part of this group because of technology.

Technology has allowed me to now want to further my studies. Technology has even allowed me to see beyond my country, because before being part of the Kofi Annan Changemakers program, I have never left the four walls of Nigeria. Because of that, I was able to go to Geneva and be part of an amazing network of young people across the world, be able to dream up a different reality for myself, be able to do the same for other young girls in my community, only because I was able to have access online. Lots and lots of girls across the world deserve this access as well.

>> ANAELLE CATHELINEAU: Thank you so much, Sophiyat, for sharing your very inspiring background. Let me now ask Syeda. The Pakistan Telecommunication Authority has recently signed a Cooperation Agreement with the Alliance of Affordable Internet to integrate digital gender issues into policies and programs. What does Internet adoption really mean in terms of STEM careers for you? You are muted.

>> SYEDA SHAFAQ KARIM: I'm very sorry. Thank you very much. So, thank you very much for this question. We have aligned with the Alliance for Affordable Internet. This is a digital cooperation agreement with them, and this will encourage mutually beneficial collaboration between Pakistan and the Alliance for Affordable Internet. Because we strongly believe that Internet is the key factor for strengthening the women to gain basic education, as well as the STEM education.

So, in order to flourish your career in the STEM fields, we need to have Internet access to the maximum of the populations, because the countries like us, in these days, we are having, oddly, 50% of the population which is female, and out of that, even, we still see that only 50% of that population is literate. So, Internet is the basic foundation pillar and the access to the Internet, avoiding all kinds of cultural barriers and to increase the affordability of the

Internet.

We see the Internet is the basic criteria for improving STEM field education in Pakistan and many other countries, because Internet can provide us the platforms so quickly and easily and in the most appropriate manner. Thank you.

>> DOREEN BOGDAN MARTIN: Thank you. Thank you so much for that. Claire, I'm going to turn to you now. We're all big fans of GSMA's Mobile Gender Gap Report. And of course, the last one was in 2021, where you looked at some of the key barriers preventing women to access mobile Internet. Can you share with us what mobile operators are doing to improve access and remove the barriers for women's Internet adoption? Where are the areas that we can zoom in on to improve security and safety? Over to you.

>> CLAIRE SIBTHORPE: Great, thanks. So, let me first start by talking about what the barriers are. So, in our research, we see that there are three top barriers: Affordability, particularly, handset affordability, digital skills and literacy, and safety and security. So, you can see, safety is not just an issue about once people are online -- particularly women and girls -- but it's also stopping people from going online in the first place.

Other barriers include lack of relevant content and services and challenges around access. So, these are also barriers that are experienced by men, but women tend to experience them disproportionately more acutely than -- women experience it more acutely than men because of structural inequalities and underlying social norms, including disparities between men and women in income and education.

So, what we do know is also that the mobile gender gap and this digital gender gap is not going to close on its own. As you mentioned, operators are tackling this, and they're making formal commitments to reduce the gender gap in the mobile Internet. And since 2016, they have already reached --

>> 30 seconds left.

>> CLAIRE SIBTHORPE: -- million women. I think this highlights that with targeted action, it is possible to make a difference. So, what are they doing? Their efforts include offering low-cost Internet-enabled handsets to address women's price sensitivity, doing emergency balances and alerts to help women feel safer when using mobile phones, improving digital literacy in education through various programs and interactive content, improving data to make it safer and more appealing for women, so doing a range of -- developing and marketing use bases to appeal to women, so a range of barriers. And I would say that by holistically tackling these barriers, through informed action, it is possible to make a difference. Thank you.

>> DOREEN BOGDAN MARTIN: Thank you. Thank you so much, Claire. And it's great that you've laid out all of the different barriers and the need for this holistic approach to tackle them.

Sophiyat, I'm going to turn to you. And of course, as an advocate for women and youth and someone who's committed to ensuring that no one is left out of the digital space, give us your perspective on how you think technology can encourage girls and young women to pursue higher education and open up other opportunities in their lives.

>> SOPHIYAT SADIQ: So, I think I'm just going to go to the theme of today, one part of it, which is access. Now, just an example from my own personal story as a young girl who grew up in one of those not very pretty areas in Nigeria. There was not much I wanted to do post university. I mean, now I have a degree in computer science, but being online, now I want to do a PhD. I want to do multiple masters, because now I know it's possible. I really want to read

so much about the world, and all of this is only possible for a young girl like me because of access, because I can see.

You do not know what you do not know. And a lot of young girls out there, in fact, do not know. It is up to every single one of us to ensure that they, in fact, know that they have the opportunity of choices and they have the opportunity to really explore more beyond just secondary school, beyond just university.

I live in a country where the number of girls who go to university every year keeps decreasing. I have a degree in computer science, but there was only ten of us who graduated, and I graduated two weeks ago. So, I didn't graduate ages ago. Like, this is how recent it is. There's still lots and lots of girls being excluded from important STEM spaces.

The key word here -- my answer here -- is access. There needs to be access, because if you do not know, you do not know, and girls need to know that they have options, they have choices, and there's 1,001 things they could do with their lives beyond the university, beyond whatever it is that their reality is now. So, the key word for me would always be access. Young girls need access, and they need to know. Thank you, Doreen.

>> DOREEN BOGDAN MARTIN: Excellent. Thank you for that. Syeda, I'm going to turn to you. And if we could touch on the need for a multi-stakeholder approach, working with industry, civil society, NGOs. Why do you think that's important to empower girls and women in ICTs? Over to you.

>> SYEDA SHAFAQ KARIM: Exactly. We believe that multi-stakeholder collaboration is very important, rather, that is the basic foundation pillar for reducing the gender gap and the usage of ICTs. So, we say that we have to involve ourselves around the -- which is introduced by the Alliance for Affordable Internet, that is for rights, access and training. So, we believe that the pillars of the connectivity partners have their footprints and connectivity access to a majority of the population now, but there are civil societies and NGOs who have their impact in the rural and the underserved areas, they have the nexus to the families and who can play the role in reducing the gender gaps and removing those barriers, which do not exactly allow women and the young girls to adopt to the latest technologies and adoption of the Internet. This is an important aspect. We have designed programs which we have introduced the target-oriented projects to which we will be including the connectivity partners and the other partners to play their rightened roles and making this a success story for Pakistan.

>> DOREEN BOGDAN MARTIN: Thank you so much. And thank you to our first group of panelists, first of all, for respecting the time. Grateful for that and for sharing your insights and your thoughts about the future. I'm going to hand back to Anaelle to take us forward in this second conversation.

>> ANAELLE CATHELINEAU: Thank you, Doreen. And thank you, once again, to all of the panelists of our first fireside conversation about access.

Our next conversation explores access even further, and it highlights that connecting the unconnected means more than connectivity. It means making sure that not only are the resources available but that they are accessible for everyone.

So, to talk about accessibility in STEM, we are very lucky to have with us here today, Mrs. Vidhya Y, Co-founder and Trustee at Vision Empower; Ms. Alicia Tambe, Head of International Organizations for Connectivity & Inclusion at Meta; and Shanta Arul, director Global Technology and Innovation, public policy at Netflix. Thank you all for being with us today.

Let me start with Vidhya. Could you set the scene for us? Can you describe why accessibility in STEM subjects is particularly important?

>> VIDHYA Y: Yes. First of all, thanks for having me here. I'm very happy to be on the panel. So, we all do understand the importance of STEM careers on development of our economies and how these careers can significantly enhance the quality of our lives. Also, the first ever world report on disability, which was jointly produced by WHO and the World Bank in 2011, reports that 15% of the world's population lives with some form of disability. And this, as we all know, is such a large population, and we surely want them, too, to be a part of these rewarding STEM careers.

Now, this cannot happen unless they study these subjects. So, it all starts with making STEM education accessible. I am a person with visual impairment myself. And when I would sit in my class, I would hear the teacher write something and say something -- write something on the board and say something, like "Look at this diagram and this is mitochondria." So, I was wondering, what is she writing and drawing? Because I was not able to see. And in math classes, I would hear teachers say "multiply these two numbers and you will get 50." So, I don't know what she multiplied to get 50. And if this is the case with every class being so inaccessible, it is impossible for a person with disability to participate in STEM education and careers, and this is the reason why we need to make our STEM education much more accessible for everyone.

>> ANAELLE CATHELINEAU: Thank you so much, Vidhya, for stressing the importance of making this kind of education really accessible for everyone. Let me now turn to Alicia. Alicia, what role can the private sector play in answering accessibility and digital inclusion for all? Can you share any best practices that you know of?

>> ALICIA TAMBE: Yes, yes, of course. Thank you. My name is Alicia Tambe, and I'm really excited to be here, because this is such an important effort. At least at Meta, our mission is to give people the power to build community and bring the world closer together by building inclusive products. And regardless of ability, that is important, and that includes people with disabilities.

Now, when we talk about what the private sector could be doing, products need to be made accessible to persons with disabilities, because it's critical to thinking about what the actual product will contribute. By doing this, you really need to have a centralized focus on accessibility in work. That's in defining, developing, and distributing different accessibility trainings. That's best practices and that's different technologies. It has to be a horizontal function, really, like across the company.

So, at Meta, and what other private sector companies can do, it can be a part of the product lifestyle. That includes the design, the research, the engineering, and working with policy and legal to really figure out how you can promote accessibility with products.

But I think most importantly, it has to be a multi-stakeholder approach. We have to work with different stakeholders. Many times, you're in a community making decisions for a community that you're not necessarily a part of. But if you don't hear those voices, you can't make the appropriate products or the appropriate business benefits. So, it's really, really important to include those stakeholders from civil society, from government, all of those who are dealing with accessibility. So, thank you.

>> ANAELLE CATHELINEAU: Thank you so much, Alicia, for sharing how we can build community through inclusive products and services. Now let me turn to Shanta. Shanta, what is Netflix doing to make digital resources, such as entertainment content, more accessible

to all people, including women and girls, regardless of their abilities?

>> SHANTA ARUL: Thank you, and thank you for having me here today. At Netflix, we're really passionate about story-telling. And we know that we build empathy and understanding, it helps reduce prejudice and is a window towards a more inclusive society. And we're really striving to have diverse and inclusive representation on and off screen because we have a member base that is diverse, across gender, ethnicity, sexual orientation and disabilities.

As pioneers of streaming, we know how it is important to make entertainment accessible to people. And over a billion people around the world today have experienced some sort of disability, so we are committed to making our stories on Netflix accessible to them.

And some of the things we do includes making sure that all our Netflix films and series support subtitles for deaf and hard of hearing. We have audio description as well for our content for members who are blind and visually impaired. We support thousands of hours of content for this today, and our goal is really to make sure that we can support this globally in the over 30 languages that we have supported today on Netflix, as well as general web accessibility, listening systems and so on.

And I really agree with Alicia that it's important for us to be working directly with the community and hearing what they need from accessible services. And so, we're committed to working to get these insights, working closely with the community, with industry and policymakers to deliver more inclusive and accessible entertainment to the world.

>> DOREEN BOGDAN MARTIN: Thank you. Thank you for that, Shanta. And now I'm going to turn to Vidhya. In your first answer, you touched a bit on how to make STEM studies more accessible. Can you comment on how we can also make workplaces more accessible and inclusive? Over to you.

>> VIDHYA Y: Yes. So, I wanted to add some more on making STEM education accessible, because I am the founder of an organization called Vision Empower, which does exactly this. To make entertainment accessible to children with visual impairment -- based on my experience for five years, I would like to share a few points. So, what we realized here is when we started work in this area, the idea is that we have to look at the problem holistically and then come up with solutions, because we began with giving science and math textbooks and making all the diagrams in the books accessible by tactile means, but we realized that teachers needed training on this. And so, we began teacher trainings. And then we realized that a lot of learning happens through touch and feel, and experiential learning has to happen. So, we introduced summer camps and games to children.

And also, we realized that we know assistive technologies are a need and we needed affordable assistive technologies for the Indian context. This is the reason why we have developed our accessible learning management platform, and also Hexis, which is our braille reader.

Now, coming to the workplace scenario, as everyone was pointing out, we shouldn't -- you know, we have to be involved with the community. Now, when we talk to a girl with visual impairment, only then do we realize what constraints she is facing because of her disability and also because of her visual impairment.

And finally, I think we shouldn't assume anything, you know, just because he or she is visually impaired or has a disability. She or he can do something, she or he cannot do something. So, instead of assuming, we have to ask what the user needs, and only then we can make our education and workplaces accessible.

>> DOREEN BOGDAN MARTIN: Excellent. Thank you so much for that. Alicia, can you touch on what policies or regulations are needed to improve accessibility, including for persons with disabilities, please? Over to you.

>> ALICIA TAMBE: Yes, of course. So, I think one of the really important things to realize, and it's similar to what we have to take into consideration in the private sector, is those governments and regulators and policymakers working to make policies may not always be familiar with the accessibility space in the sense that it's not necessarily those who are impacted who are making the decisions. But I think that it's a unique opportunity to make sure that they are involved in the decisions.

And the way that this can happen really is through flexible regulations and open consultations to hear from stakeholders and to hear from the groups, like many on the phone and video today, to see what are the needs of the communities and what has worked, but what hasn't worked. And this really happens through that open consultation process.

And I think when we're talking about raising awareness of accessibility issues, it can't just be a consultation or policies on accessibility; it has to be different issues where accessibility needs to have a certain lens, similar to where we have a certain lens on gender. We don't only talk about gender in the way of, let's have regulations or consultations in gender. You need to think of it through a gender lens. And I think accessibility is very similar, because you need to think about all of the issues collaboratively, but there has to be an accessibility lens where we're thinking, are these communities included? Will this reflect these products? And how is it that we can work together to make sure that it's accurately represented?

>> DOREEN BOGDAN MARTIN: Excellent. Thank you. Thank you for that. Shanta, I'm going to turn back to you. The Netflix Original Series "Project MC Squared" empowers girls to celebrate their skills and interest in STEM. Can you share with us, how do you think streaming services can help to challenge stereotypes and incentivize girls to make the connection between STEM and their own interests and passions?

>> SHANTA ARUL: Yeah, very simply by inspiring them and hiring them. Through our content, we see more representation on screen from communities around the world, and we know how important it is for girls to see themselves on screen and to be inspired by great and empowering stories. And so, our films and TV series help challenge stereotypes and show that women of all colors and backgrounds can be a whole lot of things. They can be doctors, champion chess players, scientists, environmentalists, engineers. But better representation on screen also starts with more representation at the office. And so, we've been working also to make sure that we do our part in expanding how we inclusively recruit.

Nearly half of our global workforce, leadership and senior leadership are women. And it is important to know that STEM is not -- STEM is in every industry, even in entertainment. To make a film, we need people with STEM backgrounds, whether it's to be an amazing effects specialist or cinematographer or editors. There are so many STEM skills that are required for a story to go from script to screen, and we're really committed to hiring diversely and looking for diverse up-and-coming talent in the entertainment field.

>> DOREEN BOGDAN MARTIN: Thank you so much for that, Shanta, Alicia, Vidhya, for sharing your perspectives on this. We're going to move now to the next conversation.

We're going to look at gender stereotypes and workplace

environments in STEM and ICT. We're going to pick up here on the negative power of gender stereotypes as an obstacle for women and girls and the importance -- and we've heard just a bit about this from our colleagues in the previous fireside chat. We're going to look at the importance of positive workplace environments, especially in STEM and ICTs, to break these barriers.

In this segment, we have Helen Molinier, Senior Manager for the Action Coalition on Innovation and Technology, UN Women. We have Louis Carvalho, diversity and inclusion coordinator for CERN. We have Elizabeth Kolade, who is a member of the Cyber Security Experts Association of Nigeria and was a mentee in the 2021 cohort of the ITU Women in Cyber Mentorship Program. And we have Lydia Logan, who is the Vice President of Education and Workforce Development, Corporate Social Responsibility at IBM.

>> ANAELLE CATHELINEAU: So, welcome to all, and thank you so much for joining us today. Elizabeth, let us start this discussion with you. Could you help us set the scene? As a cybersecurity expert, as a woman in STEM, have you encountered negative stereotypes in the workplace and academic institutions? What has helped you overcome these barriers?

>> ELIZABETH KOLADE: Hi, everyone. Good afternoon. Thank you for having me here. So, my straight answer to that question would be, yes. I remember one time I was about to meet someone on a new job and a mentor mentioned to me that I was going to have to work twice as hard to prove myself on the job. And I thought he was exaggerating on that. But when I got on the job, I realized that I really did have to work twice as hard to prove myself and ensure I was capable of the task assigned to me. And it wasn't just because I was a woman and enjoying the privilege of being a woman physically, was physically emphasizing that I knew how to do my job, and getting people to believe that I was capable of what I needed to do.

Speaking to things that helped me to pull through some of these negative stereotypes, first would be personal determination, self-determination, physically having this drive to work on the problem and looking to remove this stereotype. Second would be mentorship. When I started out, I didn't exactly have structured mentorship, but I had a number of people that I could speak to.

Also, very important is community, having a community where you can go and share ideas and engage and physically help you walk through the process. Also, we usually say that representation matters, and this somehow sounds like a cliche, but it's actually very, very true. I say this because when I started out, I didn't exactly have that through the organization, but I think it's very different now having from a number of people come up after me and I see how they thrive through the organization. Thank you.

>> ANAELLE CATHELINEAU: Thank you, Elizabeth, for your very empowering answer in the face of gender stereotypes in tech. Let me now ask Louise, why is it important to improve the gender balance in STEM? What would you say to a girl or a young woman who dreams of a future career in ICT or STEM?

>> LOUISE CARVALHO: Good afternoon and thank you for these questions and for inviting me on behalf of CERN to speak to them. Well, on the question of why it is important to improve the gender balance in STEM, my immediate response is, why not? Or, as the Prime Minister of Canada said when announcing his gender parity cabinet: "Because it's 2015." And here we are in 2022.

Now, in addition to gender balance being simply the right thing to do, in the specific context of an international organization, like CERN, there are two fundamental drivers I like to promote. First is that our personnel should reflect the diversity of the Member

States who finance our operations.

Second, we need as an organization to reflect the diversity of the population our STEM research is serving. Why? Because this is the best way to achieve CERN's hallmark standing of excellence. Research solutions for gender diverse populations need researchers who bring gender diverse perspectives.

So, if you're dreaming of a future career in ICT or STEM, then you're halfway to manifesting it. When you get there, I encourage you to contribute your ideas actively, to repeat your contribution, if you don't feel heard, and to get comfortable with self-descriptors like excellence, because you are.

>> ANAELLE CATHELINEAU: Thank you so much, Louise, for your very inspiring answer about the importance of diversity in international organizations. Let me now turn to Helene. UN Women is part of the Generation Equality Coalition on Technology and Innovation. How do multi-stakeholder efforts at an international level translate into real change in STEM classrooms and workplaces?

>> HELENE MOLINIER: Thank you, Anaelle. And hi, everyone. Well, actually, one of the reasons for creating the coalition was because we didn't see enough progress on this critical issue, and especially in the STEM sectors where women are the most underrepresented, like engineering or computer science.

In the past year, we've seen a lot of initiatives created to attract more women and girls in these professions, but the numbers are not changing much. And so, the idea was this kind of initiative is to look at the problem holistically, and it's not something that companies or institutions can address in isolation.

I think it was important to hear from Meta and Netflix to say we need communities and private sector to join forces. So, the coalition aims to join concrete commitment that will really be measured. For example, we had the Government of Rwanda looking to bridge the gap of STEM in the secondary level by 2026.

We have eight companies in Turkey that have set a ratio of 30% women in place in their tech innovation teams. So, this is really important. And they're going to do that also by engaging with civil society actors and reaching out to 500,000 women. So, this kind of initiative brings real change, are accountable, and really create opportunities for girls around the world.

>> ANAELLE CATHELINEAU: Thank you, Helene, for stressing the importance of concrete commitment, for bringing real change. Let me now turn to Lydia. Lydia, what is IBM doing to improve the percentage of women going into STEM careers?

>> LYDIA M. LOGAN: Well, first, thank you for having me. It's wonderful to be here. We are doing things both inside IBM and to expand opportunities for women interested -- women and girls interested in going into STEM. At IBM, we are taking a skills-first approach, so we've removed a degree requirement for many of the jobs that we have, which have made it possible for women who don't have degrees in STEM to get hired at IBM and have the opportunity to work at IBM and move up.

We know that women represent half of the population, the brainpower and the creativity, and we cannot afford to keep them out of these important jobs that are contributing to society and to the workforce.

With our programs, we're working around the world to encourage girls to be exposed to STEM, to think about careers differently than they might have due to cultural norms where they live. So, we have programs in India, Taiwan, Italy, Africa, all over the world, that are exposing girls to STEM.

In India, we've reached over 200,000 girls, and we've had

stories like Shopey Pachuri, who has decided to major in a STEM field and is now pursuing a career that she otherwise would not have, because she hadn't been exposed before. And we have stories like that from around the world that we consider successes. So, we are investing heavily.

We started out in 2020 in Colombia, South America, with just 6,000 women we're supporting in their training, and now we're hoping to reach over 20,000 this year.

>> DOREEN BOGDAN MARTIN: That's excellent. Thank you. Thank you for sharing that. Louise, we're going to turn back to you. We often hear the phrase "inclusive workplace." How is this different than having a diverse workplace? And do you have an example at CERN about how to make the workplace more inclusive?

>> LOUISE CARVALHO: Yes. Well, diversity is about representation, right? Sometimes visible and sometimes invisible. And it's easily measured. A diverse workplace requires conscious recruitment practices. Diversity targets are, in my view, halfway to realizing a conducive and productive workplace.

Now, inclusion requires efforts from everyone -- leaders and non-leaders alike -- and it is more difficult to measure. Inclusion means making the diverse talent heard; it means actively seeking and valuing their contribution. So, whereas diversity is conscious recruitment, inclusion is, for example, conscious promotion. Inclusion also means explicitly valuing diverse talent for their talent, and not only for their diversity.

So, how do you retain and inspire diverse talent? At CERN, the Diversity & Inclusion Program, which I head, has launched the 25 by 25 Initiative last year, seeking to increase the representation of women at CERN by 25% by the end of 2025. The implementation of this initiative is itself an example of inclusion. So, the success of the uptake has, without doubt, been this inclusive approach to engage and invite the existing diversity of the personnel, in all its diverse dimensions, means to actively participate with their unique perspective and their unique ideas, and in the result, will create a more diverse and inclusive workplace, whether or not we reach the 25% target in 2025.

>> DOREEN BOGDAN MARTIN: Excellent. Thank you. Thank you for that. Let me turn to Elizabeth. You were a mentee in the 2021 cohort of the ITU Cyber Mentorship Program. Can you share with us a little bit about your experience? And how can the support of women as peers, as role models, help other young women to overcome barriers and to pursue STEM studies and careers?

>> ELIZABETH KOLADE: Thank you very much. The ITU Women in Cyber Mentorship Program was an awesome experience for me. I was at a point -- I had been a part of quite a number of initiatives where I served as a mentor for most programs, but I was at a point where I needed to recalibrate, and it felt really good to engage with somebody and learn from somebody. I also liked the intentionality with which mentees were being paired with mentors. It was not very random. It was something that was tailored, basically ensuring that mentees were linked to the right people, were linked to the right people within the similar cybersecurity areas of interest. That was really amazing for me.

Also, I also liked the fact that mentees had goals that they were working towards achieving. It was not just a mentorship program, but they were actively working on something, and weekly, they were working on something to actually achieve that goal. And at the end of the mentorship exercise, mentees had goals that they had achieved in line with their career.

Now, in speaking to how we can help more women, I was listening

to somebody from the earlier panel, and she mentioned that we need to inspire and hire. And I think that's really important. Because, yes, it's one thing to actually inspire more girls to get into cybersecurity and the tech industry, basically, but another thing to hire them. Because one of the most challenging things that I have experienced from my experience, basically, is people actually getting their foot into the door, getting an opportunity, getting organizations to employ people who do not exactly have experience; yet, a lot of personnel study may have gone into your self-development. But it's also important that we give people a chance, investing in fresh people who are coming into the industry.

And I think as women who have risen to the top at different levels, across different organizations, I think we also have a responsibility in pushing some of these initiatives here.

>> DOREEN BOGDAN MARTIN: Indeed. Thank you. Thank you for that. So, it's not just the inspiring, it's also about the hiring, and of course, ultimately, the retention factor as well, and I hope, Elizabeth, you will stick with us in the Cyber Mentorship Program as a mentor.

So, now, let me turn to Helene. Helene, how can inclusive study and workplace policies promote gender equality and girls' and young women's representation? Tell us how you think these points are essential to a culture that's free from gender biases? Helene.

>> HELENE MOLINIER: Thank you, Doreen. I think that studies have shown that one of the most efficient ways of implementing gender equality in the workplace is to have women in leadership positions. This immensely helps change the company's cultural norms. It really impacts even the way implementation of the diversity and inclusion policies is taking place. So, having strong policy goals for hiring and recruitment is definitely an important booster, but it's not enough. You need to develop policies for students and for your employees that not just focus on the pipeline, but on making sure, as we've just heard, on putting measures in place to retain and nurture girls and women.

You need to look at the end-to-end experience to promote inclusion on a daily basis, to measure impact, and make sure these policies are not seen as a side program, but truly as a transformation effort. Having ambitious diversity and inclusion policies is certainly an important step for any school and workplace, but what we see is too many companies are putting policies on paper but not in action. So, this is why we've built a coalition to focus on commitment, on action, and bringing real change.

>> DOREEN BOGDAN MARTIN: And of course, we at ITU are very proud to be part of that effort. Thank you for that. Lydia, I'm going to turn to you. If you could share with us how you are leveraging your SkillsBuild program to reach girls? Over to you.

>> LYDIA M. LOGAN: Sure. We have a program, and I'll put a link in the chat for those of you who are interested in exploring it. It's a free online program that delivers skills for people interested in exploring many of the content areas that are data and cybersecurity, analytics, and blockchain and other of the, you know, fast-growing sectors in tech that IBM, in particular, is interested in and the areas where we have jobs that are growing and where we see the most job opportunities.

We are encouraging girls to explore these areas. We have strategies to recruit girls into these exploration opportunities through SkillsBuild and exposure to mentors that are IBM mentors. We have hands-on learning opportunities for them in many locations where we are, so they really get to see what it is that they are able to do. And then light that fire. It's the inspire part, that we've

got to light the spark and then encourage them to continue with their learning. But we've got to take that first step, and I think it's very important to make it accessible.

And I know that a lot of these fireside chats that have happened today have started talking about accessibility. And so, we're looking at what can we do offline and online; what can we do to reach people where they are? What can we do to take the first step and make sure people have the skills they need to be qualified for the first job and then upskill once they get that first job? What do we do to make sure they get in the door? And once they are in the door, we encourage them to get the support they need to be retained. And so, we do that at IBM through councils where they get the support that they need, women's leadership councils, et cetera. So, that's what we do. We have a complete pipeline of support and encouragement.

>> DOREEN BOGDAN MARTIN: Thank you. Thank you so much for that. Thank you, Elizabeth, Louise, Helene, Lydia, for sharing the lessons that you have learned and also -- and perhaps more importantly -- for laying out the concrete actions that you and your respective institutions have taken. Anaelle, back to you.

>> ANAELLE CATHELINEAU: Thank you, all panelists. And we are now moving to our final and fourth fireside discussion, which will be on the topic of online safety. If women are unable to access the Internet and feel safe online, they are consequently unable to develop the necessary digital skills and engage in digital spaces. This, in turn, diminishes their opportunities to pursue careers in STEM-related fields.

So, to discuss this topic, we are very lucky to have with us today, Ambassador Jyrki Pulkkinen, Ambassador for Innovation at the Ministry of Foreign Affairs in Finland; Mrs. Courtney Gregoire, Chief Digital Safety Officer at Microsoft; and Mrs. Shamma Bin Hammad, Founder and CEO at CyberHero. So, welcome all to the conversation. Thank you so much for being here with us today. And let me start by addressing Ambassador Pulkkinen.

For your country and government -- Finland -- as a member of the Generation Equality Action Coalition on Technology and Innovation, why is online safety, and specifically relating to girls in ICTs and STEM, so important? Over to you.

>> JYRKI PULKKINEN: Thank you very much. Let me express my gratitude, actually, for being invited here as a first and maybe the last male speaker of this conversation. So, I'm representing half of the population here, and that's a great honor. Thank you. Thank you very, very much.

Actually, we are the co-leader of the Coalition on Technology and Innovation. So, that tells us that, you know, we are taking this very seriously. It is very, very important policy goals for us that we are addressing on this kind of online safety and gender-based violence, online and offline.

But Internet is broad. Online services are very broad concept. Social media is, very specifically, the aspects of online violence are there. So, safety is important for everybody, and social media by nature seems to be such an environment where it's very kind of polarizing, you know. If you expect something, you know, it's polarized quite easily. It's a lot of bullying. You know, people are bullying each other. Sometimes they don't even know what they are doing. And also, they are harassing and violence.

And it looks to be that -- and also some studies are telling that girls are experiencing that more than boys. And you know, that is a problem, because you know, that might prevent them to participate fully in society. Internet is part of the society. Most of the

activities are online. And if girls are hesitating to come along there, so that is kind of narrowing their life and the possibilities, but also narrowing those possibilities that they see for their future in employment and studies. So, I think that's why it's very important for us.

>> ANAELLE CATHELINEAU: Thank you so much, Ambassador, for explaining how we can build safety online, and also for highlighting that this cannot be done without the help of men and boys. We have to work together. And I fully support that.

So, now let me turn to Courtney. In Microsoft's 2021 Annual Study on Civility, Safety, and Interaction Online, you record that data about teens' and adults' experience of online risks. And a number that is particularly poignant is that you found that the share of negative online experiences for teen girls and women respondents has actually steadily increased since 2018, and it's currently standing at an all-time high of almost 60%. So, what do you think needs to be done to change this trend?

>> COURTNEY GREGOIRE: Thank you, Doreen. And thank you very much for the invitation to have this important conversation today. First, I think embedded in your question is what we think is important at the start -- we need better data, and we need to make visible to all people better data about the impact of harmful and illegal content and conduct online, particularly on women and girls.

We're proud to sponsor the research that you just cited over the past six years and help bring that to light to everyone and every stakeholder who needs to be thinking about this, from government to non-profit, to, of course, the technology industry. We are also proud that this year, on the Safer Internet Day, GitHub helped release six years of our digital civility research in a gender disaggregated nature, so we can better inform the dialogue on this and understand the unique experiences and perceptions of women.

Now, with that data, it's time to act. We need online platforms across the ecosystem to take meaningful action to address harmful content and conduct online. And we need to better understand, particularly those areas that impact women and girls more.

The data, both what is reported to us by women and girls, and what platforms see when they have abuse reported to them, reflects that the nature of harassment, the nature of non-consensual distribution of intimate images, disproportionately impacts women, and there needs to be better action taken to do just that.

>> DOREEN BOGDAN MARTIN: Thank you. Thank you so much for that, Courtney. It's so important, the issue of data and being able to take targeted actions based on that data.

I wanted to pick up another point, and this is a question for Shamma. Another point from the Microsoft report was that only 44% of females reported feeling confident in their ability to manage online risks. As a young woman and cybersecurity professional, what does it mean to you to be safe online?

>> SHAMMA BIN HAMMAD: Hi, everyone. Thank you for having me. Well, regarding the question, I think everyone must be assured that the using of technology is secure online to avoid the attacks that happen or avoid data breach and the consequences. So, what could be reasons for the attacks? So, basically, I think because of lack of cybersecurity awareness and some work case biassing, they get mandated and take the women, plus the certifications of security certifications, it's a bit expensive on the people to get to. So, I think everyone must be secure online by learning about the kinds of cyberattacks, about the technology, about the right usage of the technology.

And there is already some courses that already have been

provided online, which teaches people how to be. And mostly, the cybersecurity nowadays has been automated, like when you create an account, they are based on rules, like you have to use some numeric, some alphabetic and some characters, some symbols, to make it hard. So, yeah. But it's a part of, but they have to learn more and go deeper just to ensure the safety online for every target group -- for students, parents, teachers, and others.

>> DOREEN BOGDAN MARTIN: Thank you. Thank you so much. Ambassador, I'm going to turn back to you. Thank you, again, for joining us today. And of course, we're all very grateful to the commitment, leadership, and support of Finland in the space of gender equality, and in particular, with the Coalition on Technology and Innovation as part of Generation Equality. Ambassador, how can countries like Finland support young women in their pursuit of STEM education and studies?

>> JYRKI PULKKINEN: Thank you. It's a very pertinent question for all the countries, including Finland, where we have a fairly inclusive and equal society. And actually, many women actually choose the technology field for their studies. But it's still a challenge, you know. And the governments can do what governments can do, you know. It's a very complex issue. We have to look at the whole education system from early childhood up to higher education, et cetera, et cetera. And also, society as a whole, it's a cultural issue as well, you know -- what is interesting for girls and what is not interesting for girls.

But you know, let me just give one example. In Finland, we kind of developed, because of government is able to set up structures and policies for education, we set up a STEM Center for Education which is then trying to get young children, and especially girls, to be interested on STEM education. So, we have campaigns to convince that this is exactly what they need.

But I was just thinking by myself -- I have education background by myself, you know. I have experience also creating STEM-related curriculums, you know. Sometimes I think, you know, maybe girls are right, maybe STEM education, as it is at the moment, is not really interesting. So, maybe we have to look at the STEM education as such.

Just giving an example, I created a long time ago studies for students on education on technology. And then we had studies for technology education. Sounds like similar. In technology education, we had mainly male participation, and education on technology, we had mainly female students participating. So, it really matters how you present the curriculum, how you present the education, so you can make it more interesting, and restructure education, so, naturally, basically, girls could be interested more easily on those education.

Same applies to jobs. The technology industry could actually change the way they present them as an employer. There are only a couple of companies in Finland which openly, openly says that they want to head hunt female talents, you know, to girls and young women to work with them, and they have kind of a target of 50/50 balance for women and men to be employed. So, they really want to make a change on the attitude, the whole company.

So, I think there are many ways. Governments are not able to do everything, but you know, we need also private sector companies to work together with us. So, I fully agree that multi-stakeholder approach that we can take, but it takes time, you know. There are cultural-resulted issues as well, and it takes a little bit more time, and it's complex, I have to say. Thank you.

>> DOREEN BOGDAN MARTIN: Indeed, it is. It is complex, but I hope that with the great examples and the insights that we've heard

today, we can make some concrete efforts towards closing the gap. Thank you so much, Ambassador, for sharing those initiatives.

Courtney, I'm going to turn back to you. Of course, Microsoft is also a member of the Generation Equality Action Coalition on Technology and Innovation. Can you tell us, how can technology and innovation advance gender equality? Over to you.

>> COURTNEY GREGOIRE: Thanks, Doreen. I see a direct correlation, in our previous question and discussion, to how we can inspire the next generation of women and girls in tech. They need to know that the technology environment and the online environment is a place they want to be part of, that they feel safe, that they acknowledge it is a place that they want to aspire to work, play, and socialize.

And so, core to some of our work in the digital safety concept is how we can advance digital citizenship and empower girls and women to really claim how they want their online environment to be.

I think there's been a really healthy discussion already today on some of the other phases that must be focused on: First, skilling. Microsoft is proud to support our Global Skills Initiative and partner with LinkedIn to help provide free online courses to bring people into the STEM field, show them the pathways to those career opportunities. And I'll share a little bit about that in the chat.

Second, yes, there needs to be more focus in the private sector to hire talent -- girls and women.

And third, I can't emphasize enough, hiring is just the beginning. Retention and advancement means making sure that we are thinking about how women are supported in the workplace, how they find mentors, and how they create the communities within the work environment, and more broadly, on the online environment and the technology field to feel that they can advance their careers, and they see themselves as advancing a safer digital environment for all, and yes, with a focus on advancing it for women and girls.

>> DOREEN BOGDAN MARTIN: Thank you. Thank you so much. So, before we close out this part of the conversation and then move to some Q&A, I'm going to turn the last question to Shamma.

You carry out workshops for parents, as well as for children, both boys and girls, to raise awareness on the risks and the harms found in social media, in gaming, and also in other online environments. Do you think that online safety should be a conversation for people of all ages? Shamma, over to you.

>> SHAMMA BIN HAMMAD: Yeah, actually, I do. Actually, I'm a founder of a company called CyberHero, it's a cybersecurity awareness company, targeting community groups, which I have information security awareness, like our society vulnerabilities, which are parents and children. So, I'm focusing on them by providing some awareness materials, like information security awareness identification, eLearning, and we are working also on making some campaigns targeting the women, plus another campaign for children only.

So, we focus on cybersecurity because we find that 90% of cyberattacks, the reason behind it is human error. That's the main reason behind cybersecurity breaches. So, we are here to ensure the awareness and spreading the awareness about different services by dealing with the organizations, private entities, government entities, with the schools, by volunteering groups, by targeting those people from the community directly, from person to person, just to make sure that they have the proper knowledge about it, and we are here to enhance the cybersecurity capabilities of children in early stage to make sure that they have the security skills, which we get from early stage. Yeah.

>> DOREEN BOGDAN MARTIN: Thank you. Thank you so much, Shamma. Thank you, Ambassador. Thank you. Thank you, Courtney. Thank you for those insights on this critical, critical topic. Ladies and gentlemen, this brings us to the conclusion of our four conversations today. We do have some time for questions. There have been a number of questions, which is good, put in the Q&A, as well as in the chat. I'm going to ask my colleagues here in the room -- my colleague, Jenny, if she wants to guide us in identifying some of those questions. Please, Jenny.

>> JENNY ARANA: Thank you, Doreen. As you said, we have received a lot of very interesting questions and comments in the chat. We have one question that I think would be perfect for the panelists and fireside conversation on online safety. This says "video games, robotics, and other areas that serve as springboards for future careers can be hostile. When we approach ICT education, how can we teach girls about the patterns of behavior often found in these technical hobbies?"

>> DOREEN BOGDAN MARTIN: So, can we ask any our panelists, Jenny, to raise their hand, if they wish to jump in on that important question?

>> JENNY ARANA: Absolutely. I think our panelists in the online safety fireside, perhaps from Microsoft or Shamma from CyberHero?

>> DOREEN BOGDAN MARTIN: Courtney has her hand up. Go ahead, please.

>> COURTNEY GREGOIRE: Thank you. I'm happy to kick it off. What an important question. I often think, we have to acknowledge that gaming is typically the gateway for young boys and men to be introduced to technology and start careers in the STEM space. The opportunity to ensure that that is an inspiration for girls to also advance their careers in technology and innovation needs some work, in my view, on the online safety space. We need to make sure that girls feel comfortable in the gaming environments.

We recognize in the data I shared before the true problem and challenge of online harassment targeting girls in the gaming space has a chilling effect and often turns them away from that as both a place of creative expression, a place for social engagement, a place for fun, and chills them from going into their career. So, meaningfully addressing our safety areas in a place that we take very seriously in our Xbox community, ensuring that gaming is for all, and gaming for all means you must address the core, underlying safety risks within the platforms and across the industry.

>> DOREEN BOGDAN MARTIN: Thank you so much for that, Courtney. Would any of the other panelists like to jump in? You can just unmute yourself or raise your hand. Otherwise, Jenny, do we want to take another question?

>> JENNY ARANA: Yes, Doreen. We have a question for Claire from GSMA. Jenny from Britain says, "How can we drive and foster cooperation to get focus studies and data from large industry players and organizations on girls' and women's access in developing countries, such as the CARICOM and the SIDS?" Thank you. Claire, please go ahead.

>> CLAIRE SIBTHORPE: Thanks. Yeah, I think it's a challenge. The data is a challenging issue. I think one of the challenges is we don't have enough gender disaggregated data. I think also the challenge is that you can't -- you know, you really have to get data from not only those who are online, but also those who are offline. So, importantly, that just means we need to do more demand side surveys, so citizen surveys to talk to it.

I think the problem with data from some of the providers is that it only includes those who are online. Also, there is lots of issues

around sort of data privacy and things around sharing some of this data. It is valuable, but there are some limitations, but I think it ignores mainly the people who are offline. So, I think it's just we have to invest in some of these large-scale services to understand the issue.

>> DOREEN BOGDAN MARTIN: Great, thank you. Thank you for that, Claire. Jenny, I see a question that I wanted to perhaps take a crack at myself, but others should feel free to jump in. Mire is asking about the real obstacle for women, particularly to access the Internet. And Sophiyat, you might want to jump in on this one as well.

And I think through the course of our discussion today, we have covered so many different challenges, let's say, or obstacles. Of course, the core theme being on the safety piece, so that's a big one. The other piece being on the skills piece, so lack of basic digital skills, digital literacy.

The piece that was also mentioned by the Ambassador on culture. Culture does play a big role here. Of course, the cost is another big issue, the cost of devices, the cost of services. And then, someone else mentioned -- I can't recall who it was -- context as well. And I'm going to interpret that as relevance. So, you know, why do you go online? Is the material useful? Is it relevant? And is it provided in your local language? So, those are my thoughts on that point. But please do feel free, Sophiyat, if you're still with us. Perhaps you want to jump in, or others may wish to jump in.

>> LYDIA M. LOGAN: Yeah, we offer our programming in the local language, and we have our global teams translate not only the language, but also add local context so that it is relevant to the audience. Because while the programs that we offer are generally designed so that we have some consistency globally, we understand that if it isn't relevant to the individual user and it isn't relevant with the cultural context, it won't resonate with the people who are using it. And so, we make sure that our programs that we are using with girls have some content for girls. We make sure that if it is being used in Taiwan, that the content has cultural relevance in Taiwan, the same for India, the same for Africa. So, I think that's very important. And we make sure that the translations and that the local content makes sense where we're offering the program, and we think that that really does make a difference. I think it's why we've been able to have such success, and we have relationships with the Ministries of Education and Technology in those countries that help us to make sure that we're getting it right there. I won't say that it's perfect, but we do believe that that's making a difference.

>> DOREEN BOGDAN MARTIN: Great, thank you. Thank you for that, Lydia. Anyone else want to jump in, or perhaps, Jenny, do you want to tackle another question, please?

>> JENNY ARANA: Thank you, Doreen. Yes, we have a question from Julian from Kenya. She says "No human is limited as long as resources are brought to access. The only challenge that is common in major African companies is gender stereotyping. Given an opportunity, a girl can really do well in the IT industry. The question is, how do we give girls and young women these opportunities?" Perhaps some of the participants in the gender stereotypes fireside conversation? Helene from UN Women?

>> DOREEN BOGDAN MARTIN: We also have Sophiyat with her hand up.

>> HELENE MOLINIER: Okay, go ahead, Sophiyat.

>> SOPHIYAT SADIQ: Thank you, Doreen. I think when it comes to ensuring access, especially for like girls in developing

communities, so many people underestimate what the problem is, because it's very easy for you to, like, get on your phone and Google something and just check. But, like, that's not the reality for a lot of young girls. And I can say this because I personally work in these communities, right?

And even when you do things like donating computers, there's still that part where they don't know what to actually do with it. Because you give someone like the tools but don't teach them. They have no idea what to do with these tools. And I think that is what happens when there is no guidance, but you provide them with digital technologies. Like, they don't know what to do, and so, they fall victim to a lot of things online. That's why this space is not safe because there is no proper guidance for these young girls on what to do when they get online, what to search for, and then they fall in with bad crowds, quote/unquote.

Because I see organizations who, like, donate laptops. A lot of people who live in the diaspora, live abroad, say oh, yeah, we can donate laptops and we can donate computers and cell phones and things like that, but the reality is that a lot of these young girls don't know what to do with it. And we also have very bad cultural norms. It's Africa, right? We are trained from the moment we're born to be wives and mothers and things like that, so it is very difficult for a mom to actually let her child study things like STEM.

When I go to these communities, the mothers would say, "Oh, I have a son! Take him instead. You cannot take the girl." And it is ridiculous that they would sometimes ask money in exchange for the girls. Because they will tell you things that girls are going to go out to make money for the family. So, that time frame that you want to keep the girls involved to teach them whatever it is, you have to pay for it, because the family has to feed, and if the girl is not going to go out there to get money, then what do you want them to do? So, a lot of them, so many times, prefer that you take the son because he's the bread-winner of the family and they believe that he's the one who is going to make all of the key decisions, and not the girls.

When people speak from an abroad perspective, access is very, very common. I remember being in Geneva, and I was able to just look up things from my phone. And even then, the next person beside you has a phone, could look up something for you. I got lost on the bus and somebody was able to find me the right bus station looking just on your phone, but it's not the same down here, right? Somebody cannot just say, "Oh, yeah, let me check that on my phone."

And I remember I was having a conversation where somebody was talking about Googling stuff. And I said, even when we talk about access, quite a huge number of Nigerians use phones without Internet. It sounds crazy. It sounds like, who does not have Internet in this age? But they use phones that are flat-screen phones, like your e phones, your Nokia phones, and then the phones that we had back in the days. This is the phone that my grandmother uses. This is the phone that all of my grandmother's friends use, right? This is not the phone that you can easily use to search something online.

So, when we're talking about access (audio fading in and out). For a lot of communities, what you think is access isn't what is access for them, right? Like, so, even when they have phones, because they have -- on top of them, the reality is not the same for everyone. So, it's really, really important that we understand the context, that we understand we have to teach these young girls and guide them, even when they're going online, because tools without tools is useless at the end of the day.

>> DOREEN BOGDAN MARTIN: Thank you so much. We have two more

interventions, Helene and Ambassador Pulkkinen. Then we have to wrap up. So, Helene, I'm going to turn to you and then over to you, Ambassador, please.

>> HELENE MOLINIER: I think, very quickly, it's very important to be intentional when you want to address stereotypes. We all come with bias. We all need to check ourselves and make sure that we, as I think Courtney mentioned, we have the data; we look at, where are the gaps? Who is not at the table? Who is missing? And then to get attention about fixing that. And this is something that every country and innovation ecosystem needs to do, needs to prioritize.

And if you take the example of East Africa, that's really a region that has gone a long way. And when I see one of our leaders, when I see what Rwanda is doing, it is really inspiring to see all of the commitments that are made along the way. Because to give more opportunities to women and girls, you need to look at gender parity in school. You need to look at gender parity in access to phones and technology tools. You need to look at who has access to entrepreneurship or start-ups, programs, and all that. So, I think that we are on the right path, but it's definitely still a long way.

>> DOREEN BOGDAN MARTIN: Great. We are on the right path. Thank you for those words of encouragement. Ambassador, over to you.

>> JYRKI PULKKINEN: Thank you very much. I think I just want to contribute to the discussion by pointing to two aspects. I think many times we look to the career of people very narrowly, believing that if girls study programming or coding, that's the way to get involved in technical professions and technology companies, but that's not true.

I'm not a girl, of course, but you know, you can see it. But my career, if I look at my career, my background, I'm a doctor in education. But whole of my life, I have been in technical professions. I have been programming, even, commercial solutions. I have been leading technical teams to create technical solutions. And now I'm Ambassador of Innovation and Technology. So, it's possible. It's possible also for girls to get in to technology industry through different pathways.

And so, we should actually look at also from that point of view. And then if I look at the technology industry itself, you know, I give my own daughter, as an example -- she studied business, but now she is a team member in a very good and progressive ICT company in Finland developing online payment systems, so Fintech. And she is part of the team and contributing to the team, coming from different angle of technology.

Technology requires multiple and different tasks, and she is learning now technology as part of the team member. And maybe those who are coming in from the coding part, they are learning from her the business thinking about coding. So, let's not think about that the technology industry is only coding. It is different skills that are needed.

And also, I fully agree with my colleague from UN Women, we want to have leaders in technology industry who are women, but they might be the businesspersons in the company; they might be the designers. They are not always those who studied technology as such, and still they are leaders in technology industry. So, let's open this. Stereotypes are not also in girls and boys, but also the industry career that we think we have in our mind. Thank you very much.

>> DOREEN BOGDAN MARTIN: Thank you. Thank you very much for that. And indeed, as you said, you know, you don't have to be a coder to work in the tech sector. And sometimes we're not great ourselves in getting the right messages out there to encourage girls and women in the tech sector.

Ladies and gentlemen, this brings us to the end of an incredible 93 minutes with 13 stellar panelists. I want to thank everyone. It's been really a terrific conversation. I won't attempt to summarize it, but so many key points made, from right up in the beginning where we focused on access means actually providing options and choices; the need to focus on, obviously, accessibility; products being accessibility; working with multistakeholders; working with partners; the need to keep empathy in perspective; the context piece was mentioned by many; the need to focus not just externally in the products, but internally, in terms of the workforce; the "why not" piece, because it's 2022 -- love that. The dreaming is halfway there. So, I'm sure if we're already halfway there, we can definitely get there. The importance of the skill piece, the inspiring piece, the hiring piece, and of course, the retaining piece. And while we're retaining women in the workforce, we need to make sure that we're also nurturing and upskilling.

The importance of data, monitoring; the importance of crafting the right curricula, even tweaking titles, as His Excellency mentioned, can be so important in attracting girls to this space. What else?

I think, perhaps, I will conclude. Sophiyat, there was a comment made about something you said, which I thought was great from the chat, which was, "You don't know what you don't know until you get interested in knowing what you want to know." So, with that, ladies and gentlemen, thank you so much for joining us. Thank you to our panelists. A huge thanks to my co-moderator, Anaelle. It's such a pleasure to have moderated today's discussion with you.

We have two more sessions on the ITU side today, so feel free to join in to our European session, as well as our Americas Regional session. So, thank you. Let's stay focused, because we can get there. If we're halfway there, because we're dreaming of this, I know we will get there. Ladies and gentlemen, we're going to conclude with a short video from the WSIS team. Thank you, again.

(Music)

(Session concluded at 1537 CET)

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