



# Universal Design and Social Innovation during the COVID-19 Pandemic

April 17 2020

# Gitanjali Sah

Good afternoon, dear WSIS stakeholders, dear ladies and gentlemen, it's our pleasure to invite you to the third WSIS TalkX on universal design and social innovation during COVID-19. And I'd like to welcome Dr. Giannoumis, who is from the University of Oslo Metropolitan. And he will be leading these discussions and he will moderate the TalkX there, Anthony, over to you.

# **George Anthony Giannoumis**

Thank you very much, Gitanjali. And thank you to all the support that you've given us and the other panelists on the WSIS TalkX this year, it's been an absolute blessing and honoring experience. So before we get started, I would like to remind the audience that captioning is available in teams, so you would have to just turn that on for yourself. And I'd also like to remind the panelists to please speak very slowly so the captioning system can keep up. So today I'm going to be discussing universal design and social innovation as an approach to dealing with COVID-19 and other global health crises. As Gitanjuli said, my name is Anthony. I'm an associate professor of universal design at Oslo Metropolitan University. And we're also going to be hearing from my colleagues Elise Daaland and Mike Hodin, and Mashito Kawamari. So I want to start off by simply saying that universal design is a really crazy but powerful idea that we can change the world by creating a society in which everyone can participate equally. The United Nations has mainstreamed universal design and several of its key initiatives. It is a fundamental principle of the World Summit on the Information Society and it's also a human rights officer. obligation for both the UN agencies and all of their members. The definition of universal design focuses on three key terms. It's the design of technology to be usable by all people. Let's start with the word design. Design can refer to both a product as well as a process. So we can talk about the design of a pen. Its weight, the shape, the materials that it's made out of. And we can also talk about design as a process, how that pen is manufactured,

distributed and sold. So when we talk about universal design, we have to take into consideration both the process we use to create something as well as the ultimate product that we create. You cannot have a universally designed product if you don't go through a universally designed process. Now let's turn to the word usable, the design of technology to be usable by all people. The International Organization for Standardization, the is defined defines usable technology as being effective, efficient and satisfying. This means that I, as a user can reach my goal, I can reach it quickly. And that when I reach my goal, I'm either happy or at least not angry or upset. I'm sure we've all had experiences using technology when we've grown frustrated or angry when the technology has not worked the way we expect it. So we can use we can think about universal design in terms of usability. If I'm using my phone to post a picture to Instagram can I successfully post that photo, can I do it quickly? And when I'm doing it, am I happy or at least not upset or angry with the process. Now the last part of universal design is probably the most complex, the design of technology to be usable by all people. On the surface, it seems kind of simple. We're just creating technology for what developers often call a, quote, typical, average, or quote, normal user. But this is impossible, because there is no such thing as an average user. Research has shown that the average user is a myth. So universal design isn't about creating one generic solution that doesn't really fit anyone's needs very well. But it's about creating a one size fits one solution. It's about customizing the solution for the individual. Now the challenge that we're left with is translating these grand ambitions of universal design into actual practices. And this is where myself and one of my colleagues at Harvard Law School published an article last year that lays down four principles of universal design for the information society.

The first principle is social equality. Universal Design is about creating technologies that everyone can use equally. The second principle is human diversity. Universal Design is about recognizing the barriers and different forms of disadvantage that people experience when they're using technology and participating in society. The third principle is two parts. It's about accessibility and usability. Universal Design is about developing technologies that are accessible and usable for everyone, including persons with disabilities and other socially disadvantaged groups. It's really important to consider accessibility and usability because you can create a piece of technology that is accessible without it being usable. And you can create a piece piece of technology that is usable without it being accessible. So in order for technology to be universally designed, it must be both usable and accessible. The fourth principle is probably the most important. It's participatory processes, participatory processes mean that technology developers must collaborate with key stakeholders, including persons with disabilities and other socially disadvantaged groups when they're designing and developing new technologies. This will often occur through civil society organizations. So it's vitally important for governments to ensure that civil society has the capacity and competence to contribute to ICT design and development processes.

Now this year the world has been facing the global crisis of the COVID-19 pandemic. This crisis has put into stark relief how vital universal design is for ensuring that digital communications and technologies are available to everyone. We have to ask ourselves critically, our websites that contain health information on COVID-19 accessible for people who are blind or partially sighted. We have to question our videos promoting good health practices accessible for people who are deaf or hard of hearing. We have to ask is online text legible for someone with dyslexia and understandable for someone with an intellectual disability or someone with low level Have literacy. And of course, we have to question whether or not someone with low Internet bandwidth, or someone who's using an older phone or computer can access information about COVID-19. By ensuring that health communications are universally designed, persons with disabilities, older persons, children and youth, persons living in rural areas, persons living with low levels of literacy, persons from low socio economic areas, and many, many others will have access to that information on an equal basis with others. Universal Design also means ensuring that the technologies that we rely on in education, employment, health and leisure are accessible and usable across the spectrum of human diversity. Our telecommuting applications online learning platforms, i.e. health technologies and video games, Excel Suitable and usable for everyone. There is a wealth of information on universal design that is openly available on the web. There are good practices and technical standards that have been well established on website accessibility. But the best possible options for ensuring that digital communications and ICT are universally designed is to involve socially disadvantaged groups and their representative organizations in the design of those technologies. This will ensure that when the world faces a new crisis, no one will be excluded. Now my colleague Elise Daaland and creative director of the Global Universal Design Commission, Europe will discuss how social innovation can create responsive solutions that are universally designed in the wake of global crises like COVID-19 Elise, are you there?

#### **Elise Daaland**

I'm here.

## **Elise Daaland**

Thank you, Anthony. My name is. And I am, as Anthony said, the Creative Director of Global Universal Design Commission Europe. And what we do is offer training, workshops and courses in Universal Design and social innovation. And we do this in order to build capacity on how we can solve complex problems. And these skills, they are incredibly important in these challenging times. And right now, several innovation programs and hackathons are being organized all over the world to help us cope with this crisis. For instance, I am an advisor in an organization based in also called development goals forum. And they recently brought together businesses, civil society organizations, young people, and experienced mentors for a global online innovation program with special participants from over 30 countries. And in this program, they have developed solutions

such as disinfection devices, information talkbox, and hand wash reminder software that are really making an impact in the communities where they have been implemented. What I find so inspiring about these events and initiatives is not only the amazing, impactful results that they produce right now, short term, but also the long term value that the participants gets, because they are given a set of skills that make them better prepared to solve other complex problems in the future. Because complex problem solving is actually something that you can learn and you can get better at it with the right training when we host workshops Like this at the global universal design commission, we use methods that are based on extensive research. And on the experience of successful innovators. We often talk about three skills that are very important to learn empathy, creativity, and inclusivity.

## **Elise Daaland**

You need empathy. To truly understand the complexity of a problem and the challenges of the people who are affected by these problems. You really have to get to the root of the problem if you're going to be able to solve it. That's why you need empathy. You need creativity, to be able to generate new ideas for solutions. You have to train your ability to see things in a different way and explore Are undiscovered opportunities. That's creativity. And you need inclusivity. Because the real problem solving can only happen with collaboration and diversity. And by including everyone in the process, that's inclusivity. So, trees skills that can make a huge difference, empathy, creativity, and inclusivity. And organizing such workshops and training for problem solving, innovation, and universal design is not only valuable right now, to help us cope with this pandemic. But I believe that we should continue to initiate events like this all the time, everywhere to train as many people as possible in empathy. Creativity and inclusivity. Because if we can build capacity on how to solve complex problems, and also do it in an inclusive way, like Anthony said, we will be much better prepared for the next crisis. And we will also be much more capable of solving the sustainability challenges that we already know that we are facing. So I'll leave it at that and I will give the microphone to Mr. Michael Hodin.

## **George Anthony Giannoumis**

Michael, you're on mute.

#### Michael W. Hodin

Yes, thank you. Appreciate it. Firstly, Gitanjali and WSIS we'd like to thank you very much for having the Global Coalition on Aging as a partner in our 2020 program, which of course is happening a little differently than any of us had expected. But here we are being flexible. And we thank you so much for your leadership, and Anthony and other colleagues. We're delighted to be part of this. The Global Coalition on Aging, of which I am the founder and CEO, are a group of global companies relatively small number 20 - 25. But cross sector, cross discipline, involved in the megatrend of aging. So, for example, a Phillips, an Intel, a Novartis, a Bayer, a Pfizer, a Bank of America, and Aegon, a Home

Instead Senior Care, and we all get together to address the challenges of global aging society. There will be 2 billion of us on the planet over 60 in the next couple of decades, and even more interestingly, as every society modernizes everywhere on the planet, more old and young. And so this idea of aging has been with us for a while. We are now in the year of the decade of healthy aging, start of the decade of healthy aging by one of your sister agencies, the World Health Organization. And so, our engagement with COVID-19 is unfortunately very, very substantial. Obviously, because of all the broad demographic categories. An older person, particularly one who is compromised, immunocompromised will be more challenged than at risk with respect to the current COVID-19 pandemic. So here are three points that I would suggest and leave you with. Number one, whether we're talking about in or outside COVID-19 design for the 55 Plus or 60 demographic, as Anthony suggested, is designed about diversity by itself. Again, whether inside or outside COVID-19 there tends to be a lens, which many in instinctively apply to this older demographic. Assuming everyone is saying, a healthy and active 57 year old, has a different set of needs than a very frail 86 year old. That's true generally. And it is through the lens of ageism, perhaps one of the last acceptable forms of discrimination to be very blunt. That the decade of healthy aging, we'll we'll address. So number one, the diversity you mentioned broadly is, is even as much applicable for an older demographic. And we have that strategically through the Global Coalition on Aging. Secondly, to be very clear on the role that we're attempting to play it is working with and advising the private business sector across the globe, with respect to meeting the needs for more healthy and active aging. And that, again, couldn't be more true in COVID-19.

## Michael W. Hodin

So let me just leave with three areas that require further exploration of what we're seeing what we're learning, and where the absolute applications of universal design and social innovation must apply. In order for success within COVID-19 pandemic applications today and post the COVID-19 crisis, we all hope that we'll get there sooner rather than later. Number one, elder homecare, which is relatively small cottage industry, in many ways started in its current form by two entrepreneurs Paul and Laurie Hogan, out of Omaha, Nebraska, and now is a global sector. Home Instead, Senior Care is global. They're on the front lines of COVID-19. And what we're learning from them about the needs of elder caregiving within COVID-19 are very, very significant. And that will lead to the most important change post COVID-19, which is elder caregivers becoming a central part of our health. ecosystem. Today we think of our health ecosystem in terms of nurses and healthcare professionals, physicians, of course, elder caregivers within COVID-19 where literally we are staying at home are on the front lines and they will be part of health transformation in the post COVID-19. So what do we apply to that sector for further Innovation and learning in the context of design? Secondly, our technology companies, we are at a place, and it was a reference in a news article about a week ago, that in the context of COVID-19 with respect to telehealth, telemedicine, remote care, remote patient monitoring, we have made more advances in a week than would normally take that sector

10 years. And obviously again, that's because of the applications required to be out of the hospital, even for acute care, particularly needed in a 60-65+ demographic, and particularly in a frail 84 year old, for example. So how can going forward applications of design of teh sort Anthony's so brilliantly laid out, be learned for that application. And the third area is medicine, innovation. We all know that the only time we're going to feel truly more confident as we attempt to open up our economies is when there are innovative therapies, and most importantly, vaccine, a vaccine or vaccines available. We hope that will come sooner rather than later. How can universal design and social innovation apply to further advance Innovation progress that we want in weeks or months and not years. Normally it takes years. And again, as you so well described, Anthony, how can that apply in the end once we find these innovations to ensure the scalability and access to everyone on the planet, whether you're in a village in India, or in New York City as I am, and that is utterly essential. It's not new, but COVID-19 brings that message home. So thank you for having us as part of this, and we look forward to the discussion in the next few minutes.

# **George Anthony Giannoumis**

Thank you, Mike. I surely appreciate you taking the time to present with us today. We'll turn a microphone over now to Masahito Kawamori. Masahito, are you on the line?

#### **Masahito Kawamori**

Hello, can you hear me? Hello?

## **George Anthony Giannoumis**

Yep, loud and clear, Masahito Go. ahead.

## **Masahito Kawamori**

Okay.

#### **Masahito Kawamori**

So, um, thank you very much for this opportunity for me to speak. My name is Masahito Kawamori. I'm the rapporteur of question 26 study group 16, which is dedicated to the study of accessibility to multimedia in International Telecommunication Union, key sector, key sectors for telecoms. I'd like to talk today about standards and standards for accessibility and why standards are important for accessibility. I'm the rapporteur. Rapporteur is like a chair, coordinator in discussion, and we invite persons with disabilities to our meetings so that we can all discuss how we can make ICT information communication technologies as accessible to persons with disability, as well as to persons with age, as well as other dis-privileged people. And I had an opportunity to discuss with WHO World Health Organization about the importance of standards when there was an Ebola outbreak in Africa a few years ago. And we had a discussion with a big room full of people from different countries, discussing how standards and ICT can help healthcare with WHO and they were talking about how people were willing to donate many good apps

and hardware smartphones to Africa. But most of them were unusable because they were not interoperable because they were not standardized. I think it's there. This is a very good lesson in especially in the time of emergency. It is imperative that we can use standardized products, standardized applications, standardized tools, so that people don't feel people cannot find how to use those things.

#### **Masahito Kawamori**

Standard is like a language. It's very important that you can use get used to this standard, so that people can communicate. People can interchange people can exchange and operate. So, this is extremely important and especially important for accessibility because people, people with disabilities, persons with disabilities are not. How should I say? well trained, specially trained for different devices, different applications, different tools. So for example, this tool that we're using now, Microsoft, Microsoft Teams, I don't know how accessible it is. But if it's standardized, then it should be easier to be used. There's a tool called zoom. There's a tool called Skype. There is a tool called WhatsApp, you know different things, but they're not all standardized. Sometimes some people find some tools easier to use. Some people find other tools easier to use bla bla. So that would be very, very difficult. For example, I can't find the caption here, because it's not standardized. The user interface is not standardized. So I'm in ICU. Our team or group tries to standardize ICT tools and applications and services in such a way that persons with disabilities find them easier to use. For example, we have standardized remote meeting so that we can have a standardized way of making meetings remote meetings more accessible. Or we have standardized with Anthony way, how to navigate people with audio disc audio guidance. Or we have standardized ways how people, deaf people can talk to hearing people with telephone, which is called telephone Relay Service. And at this time COVID-19 pandemic is especially actually say should I say it's a good showcase of standards because, especially for ICT, because everybody is sort of, you know, forced to stay at home, stay where you are, stay inside. and promote participation is the only way that you can communicate, especially for persons with disabilities. But at the same time, it's kind of interesting that this makes everybody sort of equal because everybody's remote for me You know, way. So IQ is trying to help persons with disabilities with standards ICT standards, to be able to communicate and to lead to better life with ICT, for example, I'm working with persons with disabilities for deaf people in the Philippines because they're locked down and they were not allowed to go out. And there is only one way they can communicate which is web to web. So we're trying to introduce remote sign language interpretation in the Philippines and also in other countries. So these are the things that we can provide and this is only possible through standards because otherwise, if you have proprietary solutions and products, universal design will not be achieved. standards are essential in this kind of universal design, especially in the emergency situation like COVID-19 pandemic. So that's my, my talk. Thank you.

# **George Anthony Giannoumis**

Thank you very much, Masahito. I sincerely appreciate the time you took to meet with us today. All right. With that, we'll go ahead and wrap up. I have 1500 on the button on my clock. So I'll thank the panelists again. Gitanjali, did you would you like to sign us out?

# Gitanjali Sah

Thank you, Anthony. Thank you to all the other colleagues. So Michael, Elise, and Masahito. It was a great debate and a great dialogue. We will keep working. Thank you very much. And please join us on Tuesday for the next TalkX on information to journalists during COVID-19 by UNESCO, EBU, and other colleagues