



## Transcript

### **Disability Innovation Live; COVID-19 & Disability**

Thursday 16<sup>th</sup> July 2020

\*Note – some of the housekeeping and webinar format information has been removed. Small edits have been made to maximise the quality and flow of the transcript. Full transcripts are available on request.

#### **Introduction – Speaker 1: Louise Gebbett**

Hello everybody and welcome to Disability Innovation Live. Thank you all, for joining us today. It's brilliant to have you join the first session on COVID-19 and Disability. My name is Louise and I will be hosting the session today.

To giving you a little bit of an overview of Disability Innovation Live - this is our very first session. An opportunity to come and share some of the work we've been doing, and some of our projects and programs. We've had lots of people ask us about the Global Disability Innovation Hub (GDI Hub) - what we do and how we do it. So we thought it'd be a great opportunity just to share a bit of that knowledge, and have a discussion about Disability Innovation and what we and our brilliant partners and contacts globally are working on at the moment.

It's also an opportunity to hear the stories behind the innovations, and the people buying the products. A lot of what the Global Disability Innovation Hub does is the innovation journey - working with lots of different people, in a collaborative way. This webinar is a space for ideas and reflections.

We're aiming to do one a month, looking at all sorts of different topics. If you have any ideas for topics that you'd like us particular to cover, then do let us know and we'll also be really appreciative of any feedback or thoughts you have on this session, as I said, is a little bit of a pilot – so there will be things that we'll learn that we can do better. We do hope you enjoy the session.

To give you an overview of the Global Disability Innovation Hub, we are a Research and Practice Center, and we're very much focused on driving disability innovation for a fairer world. We're both a Community Interest Company and an Academic Research Center as part of UCL. We were born out of a legacy of the 2012 Paralympic Games, and we're now working in 15 countries, and expecting to reach 9 million people by 2020.

What I'm going to do now is just a really brief introduction to the individual panelists that we have joining us today. I'll also leave them just to explain a little bit more about themselves and tell you a bit about their area of expertise. We have Professor Catherine Holloway, who's the Academic Director of the Global Disability Innovation Hub. We also have Bernard Chiira, who's the Director of our AT2030 Innovate Now programme. We have Dr. Maria Kett, who's head of Humanitarian at GDI Hub. And we have Dr Ben Oldfrey who's a Research Fellow at UCL and the GDI Hub. I'll now hand over to my colleague Cathy to give a bit more of an introduction to COVID-19 & Disability, and some of the topics that we'll be covering today.

### **Speaker 2: Dr Catherine Holloway**

So it's my great pleasure to welcome you all. And thank you, I looked at the participant names and realise that there are good friends as well as new names and faces. So thank you for taking the time out of your busy schedule. I'm really excited to be able to host the event today and to talk through some of the work we've been doing. You'll see that a lot of it is very much GDI Hub focus today, but we're hoping in future sessions to open up to partners – so do get in touch if you have ideas.

Today we're going to talk about Assistive Technology and the provision parallels. What do I mean by provision parallels, I mean that what we're seeing in COVID, the problems with getting devices to people to help them overcome the impact of COVID - like ventilators or C pap devices or personal protective equipment – are supply chain issues. Those market failures are things we've been seeing in the Assistive Technology (AT) world for a very long time, and we we knew they existed but COVID is now giving us a chance to measure them in much more rapid timeframes, but also look to learnings that we can use to reinforce what we know about AT and make AT systems more robust.

Ben's joined us to talk more about these challenges and the value of collaboration and innovation. Bernard Chiira will talk us through the process that we've had with our Innovate Now AT2030 programme in Kenya - that has gone from being a physical accelerator to being a virtual accelerator. There are also lots of interesting pivots around COVID in that space, and also issues of stigma and the exaggeration of inequality.

Anybody who knows anything about disability knows that stigma is is one of the primary factors that hold back a fairer world. We will hear from Maria Kett about what we can learn from Ebola and relating to the problems that we're beginning to see in COVID already.

I'm going to check that I'm being slow enough for the BSL interpreters as well, because being Irish, I'm prone to give a bit too quickly. So apologies if I am doing that, do put your hand up and let us know.

So you'll see here there's five bullet points. That really all I want to get across today is disability and the COVID-19 the impact of it, and it might be stating the obvious, but I think the first impact has been on people who need assistive technologies and services and it's not just assistive technologies, but services that provide access to information education, employment for disabled people or persons with disability have been severely affected by COVID-19.

Some of those services have innovatively shifted to, for example, digital platforms that we're using now to try and alleviate the problems of the future. The disability space has been shouting about being able to work remotely for a very long time. And we've been told that it's impossible, it can't be done. And now all of a sudden, overnight, everybody's working from home and there's no problem. But on the other side, a lot of a lot of people with disabilities are still being excluded from services because they don't have access to digital platforms, they don't have access to the Internet, and they don't have the training to use the system. So we're seeing both both good and bad.

The third thing is that assistive technology still remains vital, so as part of the UK aid funded AT2030 program, we have pivoted to help support COVID, but we've also dug our heels in a bit because we want assistive technology to keep that that main space.

More broadly on the GDI Hub was looking at circular economies and local production local solution methods to overcome things like repairability and making sure that devices were fit for use in the context in which they used. We're seeing that we are able to share that learning (of the importance of local solutions and repair) with people that are doing COVID research now, including the COVID Action Team, also a UK aid funded program.

We will be able to strengthen our knowledge of those systems, local solution repair solutions, and hopefully leverage them for increased Assistive Technology knowledge and insights.

The third bullet point I just missed out, which was collaborative approach to global solutions. The GDI Hub has always been about accelerating Disability Innovation for a fairer world. And I suppose my only point is that you can't accelerate by yourself. So we've always known that collaboration is absolutely key and we look to colleagues and other projects and programs to help us create those collaborations. I'm delighted that for example, Ben can talk to about how

we're collaborating with COVID action and with our UCL colleagues and the Institute of Healthcare Engineering.

So I think with that I will hand over to Bernard to tell us all about Innovate Now, which is one of my favorite projects.

**Speaker 3: Bernard Chiira**

Thank you Cathy. I hope you are all well and that you can hear me perfectly. So my name is Bernard Chiira, and I lead Innovate Now, which is part of AT2030. And I'll be talking to you a little bit about our journey and how we have evolved, but I just want to introduce innovate now, which is literally Africa's first assistive technology accelerator program.

Now, for some of you who may not know, Africa is now home to close of 600 innovation hubs and for a long time, disability innovators and those trying to tackle disability haven't had a place - so it's really an exciting platform, and we received really good feedback on this.

Innovate Now is an adaptive learning programme where our innovators learn as they do. We also have mentorship. And we leverage on the large network and partnerships that we have at AT2030 to bring in expertise across multiple fields. And one of my favorite concepts that we have is live labs, where we work directly with partners with disability in the innovation process, and they are able to participate by giving input and also participating in testing. We also post events and demo days to give our innovators a platform to showcase what they have to the world.

We launched our first cohort in December of last year and it was an exciting event because it was on the International Day of Disabled People. And the theme for that year actually aligned very well.

We have workshops with mentors, and office hours as well, as well as the live labs that I mentioned. Our five brilliant finalists, that came out of our first cohort,

had a demo day earlier this month. And what I wanted to mention about these startups is that they are really driving disruption around assistive technology in Africa. And they are working across many areas and showing that with energy and vision, and very little resources, a lot of innovation can happen.

So how does a digital shift look like when it comes to supporting entrepreneurs? Literally, every accelerator program in the world has had to go back and relook at how to support startups during this time. So for us, COVID-19 caught up with us towards the end of our first cohort - but we were able to actually shift our model and this was very useful for purposes of continuity. Our demo day and pitch event was live on Zoom. We had our judges use tools like Google Sheets to rate our presenters in real time, slack for networking and showcase which can be very hard to replicate online. We're very happy with the engagement that we got.

So what digital activities are extremely scalable. Being able to run programs that support entrepreneurs virtually means that they can be replicated much easier than physical workshops. Too many businesses have been affected and had to close down, but we are lucky to have been able to shift to digital, ensuring continuity of our program and of course, safety.

Safety is the topic during COVID, but I think for me, from an innovation perspective, the beauty also is how you're able to analyze and track and answer the challenge.

It is really difficult to replicate the quality of human connection and the experiences that you have. And also technology has been a challenge - we have, internet connectivity challenges, but these are challenges that we can actually overcome. And most importantly, when it comes to disability is digital accessibility and ensuring everyone has access.

I'm very excited to speak about our next cohort, that begins on the 21st of July. This is going to be entirely virtual, so we're really looking forward to this new experience, and to see how we can deliver value to our entrepreneurs. We've

actually just finished our selection process, and we'll be announcing our second cohort soon.

So I just wanted to leave you with this thought - the power of innovation, inclusion, resilience, and agility in terms of being able to survive a pandemic – and the ingredients of being able to persist. Thank you very much.

### **Speaker 1: Louise Gebbett**

Thank you very much Bernard. I think it's been really interesting hearing from you, and also seeing the common themes that came through. There are some real benefits in delivering programmes and projects virtually, and the impact that can have on their potential scalability and reach (particularly in terms of geography). But also the accessibility element as well - and how actually by moving digitally, and by shifting some of these programmes digitally, accessibility can be benefitted, but also can have its challenges as well - so thank you very much Bernard. It's been really interesting hearing that. I'm now going to hand across to my colleague Maria, who's going to introduce herself in a bit more detail and talk to you a bit more about her work, focused on Humanitarian.

### **Speaker 4: Dr Maria Kett**

Hi everybody, I'm Associate Professor of Disability in Humanitarianism at UCL, and I've been around for a while now, and I guess I know most of you, or many of you.

I want to talk a little bit about some of the work that I've been doing that I think has a lot of bearing on COVID-19. And I want to talk about a project that we did, funded by DSRC (between 2014 in 2017), which was looking at the impact of the access and inclusion of people with disabilities and multi-dimensional poverty of people with disabilities in Liberia.

During the course of that research, the Ebola outbreak happened in West Africa, and it had a significant impact on our work. It offered us an opportunity to

understand some of the consequences and impact of the outbreak on persons with disabilities - so I'll talk about these learnings.

For those of you that don't know Liberia is in West Africa. It is surrounded by Sierra Leone, Guinea and Cote d'Ivoire, and is an area that had a significant Ebola outbreak in between 2013 and 2016. Liberia itself is a poor country. It's a relatively small population about 5 million - the conflict many of you might remember ended in about 2003. The conflict had a long term effect on the population. It's a young population and a very poor population.

In terms of disability Liberia ratified the Convention on the Rights of Persons with disabilities in 2012. And as in many places, there's patchy data on disability - the last census which is now overdue, gave a prevalence of 3%. The World Bank core welfare indicator survey using Washington Group questions gave a prevalence of 6.4% and service have given a much higher prevalence which is probably near the case. Ebola caused about 4800 known deaths in Liberia. The Ebola outbreak required a huge international response, a big humanitarian response, but increasingly, it was realized that it was the weak health system and weak political system that exacerbated the spread of Ebola, much more than the cultural and social practices of people in those countries.

The Ebola outbreak highlight existing inequalities and lack of supporting communities. I think although Ebola and COVID are very different, there are some similarities in the responses. There has been some work talking about the preparedness of West Africa, in part because of their Ebola experience to manage and deal with COVID-19 better. In Liberia, they have been (known to date) about 1000 cases, and about 47 deaths according to the World Health Organization. A state of emergency is in place and cases are rising. Evidence would suggest (from social media and our research partners) that people with disabilities are unfortunately experiencing an COVID-19 outbreak in a very similar way to how they were experiencing the Ebola outbreak - that is to say in a not very inclusive way.

I want to talk about some of our results. This is a part of an existing project, and there are a list of references of current and future publications at the end of this. I'm not going to explain the quite complicated survey mechanisms, but we did both quantitative and qualitative research data, which has already been published. So I want to talk about drawing out some of the lessons that we've learned. We know that households of persons with disabilities in areas exposed to Ebola experienced a decrease in social life. Conversely, households of people with disabilities in areas that had more Ebola actually were less likely to restrict their movements. There are a number of implications that we can draw out from this, as one of our respondents said, "if we don't beg how do we eat, how do we support our children?". The problem here is People with Disabilities are reliant on others or themselves because there's very limited state support despite the government of Liberia's commitments to human rights, including signatory to the UN Convention on the Rights of Persons with Disabilities. This means that people with disabilities are more likely to be at increased risk of infection, having to go and meet other people, or rely on other people.

This has implications for COVID - people have to weigh up these risks. Another point about this is that relying on other people isn't dignified, again, not in line with convention or the UN Convention on rights for Persons with Disabilities. Universal social protection could play a key role here, but it's not yet widely available in Liberia. Another challenge is a lack of delivery on promises that have been repeatedly made to people with disabilities, particularly around election times about that stuff and goods that will be provided that are never provided. This in turn erodes trust around government and state support and therefore people are less likely to rely on the government for other things.

Like public health messaging - and this is indicated in the number of people with disabilities who didn't listen to government or healthcare advisors – people often listened to community leaders. That in itself isn't necessarily bad, community leaders played a huge role in the eradication of the Ebola outbreak, however it does mean that people might be getting their information at a different time or a different rate, and it may be less accurate. It may mean that if people are not

included in more formal or official networks, so they maybe missing out on other avenues of information and advice as well.

It also highlights perhaps a lack of trust in the healthcare system, and if people aren't listening to the official channels, then who are they listening to? We know that the overall respondents felt that they were continually perpetuated to be treated as outsiders and rejected, shunned. When asked about why officials didn't engage these communities, the responses were quite mixed. Some weren't given a specific fund to include people with disabilities in their work, and others found it time consuming and time was of the essence in getting the emergency response out. It wasn't necessarily that people with disabilities were actively excluded, but they weren't actively included. Which is really important in community level activities that were meant to regenerate the economy after the outbreak - I think this has got a significant relevance for the post COVID world and in terms of health care provision.

We know that people with disabilities were reluctant to go to hospitals and formal healthcare services and were more likely to self-treat or go to traditional healers, as one of our respondents says "I was afraid to go to the hospital so I used to buy my medicines". There are lots of implications for this, in terms of using incorrect medications, risk of perpetuating or ethically exacerbating existing illnesses, fake medications. Also, if people are too afraid to go to the hospital, it may have other implications in terms of healthcare access. We also know that people with disabilities face challenges with accessing healthcare system even before the Ebola outbreak, for example, inaccessible hospitals, lack of sign language interpreters, additional cost for transport. And I think the overall sense from the people we interviewed and spoke to was that healthcare workers didn't really have any training about disability. And this has got a number of implications.

The first is that it doesn't line up with existing human rights commitments. And it means that for people with disabilities therefore it's very ad hoc if they get treatment - and this has huge implications for in terms of access to services,

particularly around COVID-19. We've seen this in other countries where people with disabilities are not prioritized on the basis of their disability. So a significant lesson. We know there's increasing evidence of the long term health impacts and disabling consequences of Ebola, and we also see the same increasingly with COVID-19.

There are often conditions that require long term health and rehabilitation, including assistive technology and devices, and psychological support. Most of these services aren't available in Liberia and will put pressure on an already fragile healthcare system. There's likely to be an increase in vaccine preventable diseases such as polio, meningitis and other untreated health conditions, including maternal and child health care services. Again, many of these will have long term disabling consequences. And we've seen this situation before after the conflict in Liberia. And similarly after the COVID-19, putting an increased pressure on an already stretched healthcare system.

A fact that really came to light for Ebola virus disease survivors with those without a formal diagnosis (for people that didn't go to an Ebola treatment center and get a positive diagnosis) were unable to access to supports and services that Ebola survivors could access. So this is a catch-22; people were too afraid to go to the treatment centers in the first place, therefore they didn't have a positive test - therefore weren't eligible for any of the benefit supports. And I think we can say that there's a risk that survivors of COVID-19 will face a similar situation given the paucity of testing support services in Liberia.

A significant lesson to learn is the protective nature of these knock on effects on the economy and the society. We know that there's huge impacts on community cohesion, loss of education, reduce child protection, jobs and food insecurity. People with disabilities were already struggling before the Ebola outbreak, let alone the COVID-19 pandemic - there's very little in the way of support and social protection services. So this is going to be a cycle that's very challenging to break. I want to underscore this because reducing inequalities is the key goal of health security. And there are several systematic attempts to address this, including the

WHO led National Action Plans for Health Security which Liberia completed. It states quite clearly that they want to put adequate implementation of the action plan in place to reduce morbidity, mortality, disability and socio economic disruptions due to public health threats and events, and contribute to the attainment of the health related Sustainable Development Goals.

So far, the action plan focuses mainly on what Paul Farmer has called “systems and stuff”, much less on how to reduce inequalities. And as yet, there are no obvious measures for this. Hardship of all levels of the county development projects were still experiencing that several years after the Ebola outbreak. So I think we can see that COVID may well have the same challenges.

So what lessons can we learn from all of this? Can we make society more equal, addressing inequalities has been called a key technology of epidemic control - and I think this is a really important point. If we can reduce inequalities, address social injustice, the likelihood is that it will increase trust in government services and support. In turn, people will listen to the advice given and that will reduce future risk. We need to do that without shifting the blame to the very communities themselves. However, preparedness is really key to this not just at the community level, but at the systemic level as well. We know that there were a lot of lessons that could be learned to improve community responses, and the communities could be supported in a much better way.

We've also seen that there are gaps and exclusions in the community. And we need to be mindful of that when we're addressing these community level interventions. Health care worker training will strengthen the preparedness of the healthcare system. I've also spoken about the need to increase trust in the state, and the provision of social protection may be one way to do that. We also know that innovation, particularly mobile innovations or technologies (digital or mobile technologies) can be a huge opportunity. We also know that for people that don't have access, this could be even further an exclusionary, and we need to be very mindful that we don't perpetuate and create further exclusions. I think my final point is there are no quick fixes to all these challenges. These are deeply

entrenched, and we need to fundamentally rethink how inequalities are addressed to achieve the social transformation necessary. I will finish there.

**Speaker 1: Louise Gebbett**

Thank you Maria. I think that's that's really interesting to take a completely different look, at Disability and COVID from a Humanitarian perspective. For me personally, I was really interested to see that balance between healthcare and government policy, and how communities are interacting with all the different mechanisms, but also how stigma and cultural settings also play a part in that.

There's really interesting reflection along some of the other innovation focused technology pieces, to see how that all fits together and how they all interplay.

I'm going to hand across to my colleague, Ben, who's going to talk to you in a little bit more depth about some of the innovations and the projects he's been working on around COVID-19 in the last few months.

**Speaker 5: Ben Oldfrey**

I'm Dr. Ben Oldfrey, I'm a Research Fellow and I sit between GDI Hub, which I'm sure you know, but also the Institute of Making, which is another Institute at UCL interested in making both traditional and novel methods and materials. My research is mostly around prosthetics and materials and digital fabrication and how we can apply those concepts to low income settings.

I'm going to talk to you a little bit about the work that we've been doing at COVIDaction. To set the scene – in our previous AT2030 work, we've been exploring in depth the benefits and pitfalls of attempting to push out new localized approaches to production, using digital fabrication (things like 3D printing), so that we could move towards this more distributed model of manufacture, and encompassed in this localisation. There's multiple processes and potential benefits of that approach. A major one is the increased ability to have repair services. And if you're producing an item locally, then you can also very easily be sourcing spare parts for those devices - but also you've got to have the expertise.

An overwhelming majority of the lifespan is down to the repair and maintenance of that device. However, because of the way in which, traditionally it's manufactured that repair is hard to incorporate into the design, especially if we're not expecting that repair can happen. In AT2030 we're interested in how communities approach that repair problem.

There's also additional benefits, customization, which is so crucial to a lot of AT and adapting designs to both specific user needs and local context, they all become much more possible with with localized manufacture, but it is difficult for this to gain momentum. Part of the reason for that is because all the aspects that I've been talking about, but also about the use of local materials. In order for any one part of that puzzle to work well, you need all of the other pieces in place and it makes innovating in this area quite difficult. You need the system to be there first, for you to be able to really, really mature that as an approach.

The COVID pandemic has seen huge problems of supply chains around the world, and it's hit different local contexts in different ways - we've been looking at that, along with the massive massive global need for PPE. COVIDaction is where GDI are involved. There are different themes in COVIDaction, we have data stream, we have resilient health systems stream and we have local productions, local solutions, which I'm leading on. Funded by UK aid, we've had a massive response of 1200 or so innovations. And so talking about the local production local solutions call, we're really looking to address the supply chain issues that have come up and addressing the the need to be producing PPP across the different contexts. This is done in different ways - we've seen in the UK, that crowdsourcing of 3D printed face shields has really come through and it's this cross sector approach to addressing that need, which has meant that achievements have been made and successful rapid response has has been done. We're trying to mature these local resilient systems in a variety of local contexts across Africa and some Asian countries.

We've also seen that because of the because of the global context, and some of the supply chain issues that were previously blocking our ability to innovate and

innovate in this area, for AT are actually improving. So for example, a partner of GDI Hub, Fit for Purpose, who works in upper limb prosthetics in Jordan - previously had huge blocks. It was very difficult to get off the ground, but purely because of the import tax that was placed on 3D printing filament. Because of this rapid response for PPE, some of those countries are addressing and changing import tax structure - and this could bring like huge benefits. As we get into the long-term after COVID we're really looking to see if these systems (that we're nurturing for local production of printing, and more traditional production methods) have the potential to be taken up by AT. And if we can capture this, then there is great potential, because you need this systems approach to developing these localised production systems.

If we can hold onto that post COVID there's quite a lot of exciting things as we go into the future. The AT2030 innovation ecosystem with Innovate Now and the local production systems that we're nurturing with COVIDaction in Nairobi and other locations - can strengthen one another, and hopefully unlock supply chains. But to best make that happen, it's vital to understand stigma and inequality around disability during these turbulent times, so that progress is achieved in holistically beneficial way.

**Speaker 1: Louise Gebbett**

Wonderful. Thank you, Ben. That was really, really interesting. For me what really strikes home is the impact or indirect impact COVID-19 can have on disability innovation, particularly around those processes of unlocking supply chains - and really getting some of those mechanisms that weren't currently working around assistive technology to accelerate, and for them to become a priority for decision makers as well.

It's a really interesting space, and I'd be really interesting to find out in six months' time how those different elements have come to play, and what the impact is on the production and the availability of assistive technology, and how that plays out in the future.

I'm now just going to hand back across to Cathy, just to give a few reflections on some of the some of the areas we've discussed, and how they fit together in terms of the innovation landscape, disability and COVID - and how the different processes are interacting.

### **Speaker 2: Cathy Holloway**

So I would I wouldn't talk for too long. And hopefully I'll speak slowly enough, because I'd like to get some questions coming in. So I see there's one question answered, but please do type your questions as I speak. And you left me with the slide as well, which says, 'Why is innovation important in addressing the wider implications of COVID-19 across the local, national and international levels?' And I suppose, for me, the journey that we've been on with with GDI Hub has been quite an interesting one. Taking on the AT2030 programme was a huge challenge, and a lot of innovation just in setting it up and getting it going. And then trying to make decisions around whether or not we should pivot for COVID. And how we collaborate with new partners like COVIDaction has been has been a really interesting process. For me, I think the thing that really stands out across everything is the fact that the highly structured systems are not resilient. We've always known that, but they're not.

Assistive Technology services could be delivered at a more local level, especially with digital interventions. So as part of the overlap between AT2030 and COVIDaction, we're building a new platform called Innovation Action, which, if I'm very honest, the first version of at the moment might not look very exciting. But the second version, which is coming soon, hopefully will better explain the vision of that platform. The vision of that platform is to help amplify the kind of connections that Ben spoke about, and the connections that are needed for new innovators.

We time and time again hear about people, new innovators, who've come up with a good product. But then they don't know how to get the supply chains working, or they realise that there's not the required infrastructure like pipe oxygen – the process are not present. They get caught as they don't know how to penetrate

that system. It's such a difficult system to get into, and so lots of innovations fall away at that point. It doesn't matter if that's in COVID or an Assistive Technology or in digital skills for disabled people, or in livelihood programs. There's so many things where we could leverage the learning. We will be will be doing that in due course.

At the other end, our AT2030 programme in Sierra Leone had to pivot so rapidly, because people with disabilities needed money to provide for food. And so we had to pay for peoples' food to be able to then go out and give advice for COVID for people with disabilities. And so what I'm really conscious of is as COVID happens, and as as we rebound, as a society how we really do make the world a bit of a fairer place so that we're not just driving the very top end of of innovation, but that we are innovating and right at the bottom of that pyramid. Making sure that everybody is is brought with us. So that is my end of my little reflection. And maybe we could go to some questions and answers

### **Speaker 1: Louise Gebbett**

So the first question we thought we'd just discussed in the group today was why is innovation important and addressing the wide implications of COVID-19 across the local, national and international level? So we wanted to get the panelists reflections on this. I will go across to you Bernard just to hear from your perspective, how you think those interplays, and what it is you think the priorities are, focus on the national level in terms of kind of the accelerator, but actually what what is needed at the National & International level as well.

### **Speaker 3: Bernard Chiira**

Yeah, thanks for that. I think when you talk about innovation the bottom of innovation is solving problems in a new way that allows more value to be delivered. And I think when you look at the context of disability and especially lately and COVID-19, what many countries are now realizing is that it's actually possible to break some of the barriers that have existed for a very long time when it comes to intervening for disability. For the first time we are seeing countries prioritising innovation in terms of addressing disability issues. I speak about Kenya as an example, or the very first time we are seeing the government

actually putting into place policy work that is going to support innovation, for assistive technology and to actually make resources available. And I think what COVID is really doing is to show us that there is a lot that is possible. And that being able to respond to what the market is telling you, to what the person or the people need is going to be very important. That level of empathy and changing mindsets is going to be very important in terms of innovating. Thank you.

**Speaker 1: Louise Gebbett**

Brilliant, thanks very much, Bernard. It's really interesting. So same question Maria, I think it'd be quite interesting from your perspective of healthcare and humanitarian, what is the need from local, national and international? And where do you think those drivers need to come from?

**Speaker 4: Maria Kett**

I hope that my presentation sort of highlighted some of the areas of need within the community in Liberia, as I said, it's still an unfolding situation. And we don't really know how it's gonna play out in terms of the need at all levels of the community in Liberia is huge that the access to assistive devices or assistive technologies or innovations is very limited. I think the drive will be a very different level of a health system. But I think what I would like us to try and learn is the longer term impacts, and how we really need to start thinking about these. It's important to do the immediate work, but we really, really need to start thinking about what are the implications of this going forward in the longer term.

**Speaker 1: Louise Gebbett**

Wonderful. So I'm aware that we're starting to get towards the end of our discussion now. So I thought we might move across to the second question, which was, can we emerge from COVID-19 a more equal society? So I think Cathy, it will be quite interesting to hear your reflections on this. And maybe if you've got any thoughts on what the priorities might be, or what we can do within the disability innovation to push to this.

**Speaker 2: Cathy Holloway**

We're starting the conversation now. Today. I think that one of my colleagues reflected recently to me that it's stories that change minds, not maybe facts, and I think we can start to tell the story better. How, firstly, people with disabilities or disabled people are not only equal members of society but but brilliant members of society who are highly resilient and very innovative. And also that the space for innovation around assistive technology and around local solutions, as well as around the digital spaces is really ripe for investment. To call on governments to really look at this space as, as a ripe area to grow economies.

And all of this, won't be possible unless we really engage. Some of the beauty of Maria's research is around the engagement of users of end users and you know, as an interaction design person, we can't design things without knowing and really understanding the context of use and understanding the user needs. We can't develop a policy or a system or solution without talking and working with people with disabilities or disabled people. And so that's that's the challenge - all of these little bits of the jigsaw have to kind of come together. And sometimes you need the system to be in place. But I'd argue that there's lots of places or lots of bits of the jigsaw that could drive solution in a different country or a different space. So I think if you have an idea or solution, and you know, we're here to help, but there are others that are here to help too.

**Speaker 1: Louise Gebbett**

We've got a few questions coming in on the chat box. So I'll maybe just go through a few of those. We've got somebody's asking or wanting to know a little bit more about the models of change in healthcare systems and manufacturing, and how it's been impacted over the last few months, particularly in Africa. And what other economies can learn from those experiences. So I think maybe if we come to you Ben if you've got some reflections and then obviously, we'll also come to your Bernard.

**Speaker 5: Ben Oldfrey**

Yeah, sure. Africa is a good example of where these problems in supply chains globally have come up due to COVID. They've really highlighted the fragility that

comes with having a whole value chain that stretches across huge and geographic locations. It brings with it huge environmental costs, and that's very much in the Zeitgeist, but what we see for these products is the lack of flexibility to change. And with COVID, it's just been made loud and clear.

The problem with such a long value chain is when there's a problem along it, you can't adapt it. And what happens in that scenario is any one player in that chain that adapts, they're not in the chain anymore, new suppliers, new innovators, new new buyers will come along. And unfortunately, it's usually the people at the bottom of the pyramid left off worse, and different countries are seeing this.

What we see happening is people wanting to find ways to make manufacturing resilient in the future. This could be using local materials to produce or it be using machinery that's more available, or it could be trying to bring in that kind of machinery to the local setting.

One of the things that is interesting is the admin and the design sharing that's happening particularly around PPE. It was happening before, digital sharing and designs being passed around. Digital manufacturing techniques don't have to be too expensive. It's interesting the way in which we can put that sort of the High Tech High Tech manufacturing, and transport into lower income settings. So there's there's there's some equalization across settings, which could be happening in the future, I think.

**Speaker 1: Louise Gebbett**

Thank you. It's really interesting. So I guess, Bernard, it would be good to hear from you in terms of your experience, within and around the accelerator, how manufacturing of he has been impacted. We've also had a question asked, around drawing on the lack of digital access, and how can innovation make sure that we're not leaving people behind. So it would be good to hear reflections on that as well.

### **Speaker 3: Bernard Chiira**

Yeah, thank you so much, I think when it comes to manufacturing, and then looking at specifically the situation in Kenya, it is pretty much the same across Africa – in that we've seen innovators being very frugal, or being able to actually use very lean manufacturing methods. And I'll just give an example. The finalist in our first cohort, Lincoln, he is manufacturing electric wheelchairs. But he's utilizing, circular economy concepts like recycling parts from other components to actually build new ones. And I think this has been very interesting to see.

The validation that manufacturing can in very low resource settings be done. I think the question is, how do we bring in new technologies that enable us to reach, or the local manufacturers to reach, a high degree of accuracy and also of quality while keeping the costs down. I think it's going to be very interesting to see how all this comes into place in terms of giving access to technologies to entrepreneurs.

On to the last question question about digital technologies and ensuring that we can leverage this to bring everyone on board, I think, it's a very interesting case. Our second cohort is going to be focusing on how can we leverage mobile devices, especially for persons with disability to make it accessible, and also to ensure that persons with disability really can have the same level of access to products and services that are larger being deployed digitally. And I think our second cohort is going to give us more insights on what we can do and what we can learn in terms of leveraging on digital platforms to ensure equal access. Thank you.

### **Speaker 1: Louise Gebbett**

Thank you very much. So we're just coming towards the end of the session, we've just got a few minutes left. So before we start to wrap up, I just want to open the floor to the panelists to get any final reflections or any key elements that you'd like people to take away from today. So go to Cathy to start with.

### **Speaker 2: Cathy Holloway**

So three things for me digital, digital, digital. Making it accessible, digital and harnessing secondary supply chains. And the third is how we adapt our systems then our services, provision services to leverage those advantages.

**Speaker 4: Maria Kett**

There's lots of questions in the box about what we can do differently. Tom Palmer has asked a question about what does the international humanitarian system need to change for interventions in crises - just to say there's a piece of work going on, which I'm leading on to look at what the humanitarian system needs to do. The first thing I'd say is it needs to be aware about the need to do this. And I think thinking through some of the implications, for example, the long term disabling consequences of COVID. Focusing people's minds a bit more that we're not just talking about the need for wheelchairs or whatever. It's much broader than that, it's a much more long-term than that. And I think the more we can try and highlight the importance of it, and get people to be aware that the current system isn't effective, and we need to improve it. We need to make it much more collaborative, much more coordinated and more innovative.

**Speaker 3: Bernard Chiira**

My final thoughts will really be just to say thank you. And also to say that I think we'll just go back to what Cathy said earlier, the sort of stories that people see, what people hear - can have a huge impact in terms of starting to change the mindset. I think when it comes to innovation, especially in AT2030, we really need to create a lot of visibility for innovators across the world, and especially in in Africa and other low income settings where we do have very innovative people that are, trying to make a difference, and they just need that visibility. That visibility should be followed up with action and investment.

**Speaker 5: Ben Oldfrey**

For me maybe the overarching concept that comes to mind is local capacity to produce and local capacity to repair and maintain devices, and how they will and how they are linked together. But also that building that local capacity and the capacity to to innovate it gives us outside of that local context the capacity to

access that local knowledge, the user knowledge that could be incorporated into the design process.

**Speaker 1: Louise Gebbett**

It's really interesting to hear that actually a lot of this is really broad, and its really long term, and that its going to evolve over time. I really look forward to hearing a bit more about this, and something we can maybe address again in a future session and pick up where we left off.

Thank you so much for everyone for joining.