

Transcript Disability Innovation Live; Inclusive Design

Thursday 17th September 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. Welcome to Disability Innovation Live, in this session today we're going to be exploring inclusive design, looking at what if we built an environment and aworld that was accessible to all?

So Disability Innovation Live, these sessions are the Global Disability Innovation's monthly webinar series and are very much focused around sharing knowledge and experiences in disability and innovation but also really looking at the stories behind the innovations and the people behind the products, so getting in a little bit more depth around some of our work and our partners' programmes.

It's very much an informal space, for ideas and reflections and we really welcome your feedback. To give you a bit of an overview of who we are, the Global Disability Innovation Hub is a research and practice centre driving disability innovation for afairer world. We were born out of the legacy of the London 2012 Paralympic Games, and we are both a Community Interest Company but also an Academic Research Centre as part of UCL. We work across 33 different countries, and we are aiming to reach 15 million people by 2022. We've got a global panel joining us today for the session. So I'll just briefly introduce them, so you have got an idea who is coming up, but I will leave each individual panellist to introduce themselves in a bit more detail and the areas they work in. We are going to be hearing from Iain McKinnon, who is one of the founders of the GDI Hub and also leads all our inclusive design work. From Mikaela Patrick, from the GDI Hub, from Peter Carr who has done all sorts so I'll him to introduce himself in a bit more detail, and we have Tamirhuu and Nyam-Ochir who are based in Mongolia and we have Nina from Indonesia as well, so a broad perspective of lots of different experiences and knowledge around inclusive design globally.

I am going to start with handing across to Iain McKinnon who is going to give us a bit more of an introduction to today's session.

Speaker 2: lain McKinnon

Thank you, Louise. Thank you so much. Welcome everyone. I am Iain, I lead the inclusive design work for GDI Hub and so this introduction sets out what inclusive design means to us, what it means to GDI Hub, why it matters, and I'll also introduce our international work to you. So the image you can see on screen is me with the Built Environment Access Panel on the Queen Elizabeth Olympic Park in east London.

I wanted to start with - I am sometimes asked, as we all are, what is it you do for a living? And to be honest, it's a question I often try and avoid because I feel like I have got quite a lot of explaining to do with that. It's not quite as simple as saying "I'm a plumber, ""or "I am a lawyer" and my current stock response is to say: I work in inclusive design, followed very quickly to pre-empt the inevitable follow-up question of, what does that mean, with: I make sure designers think about disabled people and older people when they design things. And I have found that most people tend to get that. They usually respond by nodding their head and saying "oh that's really interesting", maybe they are just being kind, I'm not sure, but people tend to understand that. And for us, inclusive design is about people. Quite simply, it puts end users, and that includes all of us, with all of our differences and all of our diversity, at the forefront of the minds of the decision-makers responsible for how something ends up being the way that it does.

That's the same approach and mindset and methodology for a new building as it is a website, or a new car design, or the way you serve a cup of coffee. But our emphasis is on the built environment, the world around us, and how can we shape that? So why does it matter?

This slide shows images of some inclusive design interventions that we have made on the Queen Elizabeth Olympic Park in Stratford, East London. So why does it matter? This is a key question and in my mind it's the first step in delivering and implementing inclusive design. I think you have to ask, do you and your stakeholders really know why inclusive design is important? Do they understand the rationale, do they appreciate the wider benefits, do they realise that it can support them too? In my experience, the answer to many of these questions is often no. And that's why we also focus on inclusive design education and training, as we recognise that long term, those responsible designers and decision-makers need to be making informed and inclusive choices of their own, without relying on interventions from so-called experts.

It also matters if you care about your end user experience. For us, good inclusive design delivers equally positive user experiences for all end users, regardless of ability or support need. It delivers intuitive and more elegant solutions that work better. And this in turn helps eliminate the need for future alterations, add-ons, operational support, mitigation and compensation. You also just create places where more people actually want to be. And not many businesses can argue against that.

I would like to go into the next slide, please, which is about setting our work in the global context, we are now working internationally. But my personal experience is very much rooted in the United Kingdom, the UK. I was the inclusive design champion for Queen Elizabeth Olympic Park, and so was very focused on just East London for eight years, as part of the London 2012 Paralympic Games Legacy. However, I was very privileged in that position, as a lot of hard work had already been done culminating in the creation of that role. High level commitments were in place, a structure for delivery was in place, legislation was in place, regulations were in place, and it already had the foundations for good policyand guidance to build on. I even had a ready-made access panel of local disabled people and experts to guide me.

So now, eight years on, working on global programmes, GDI Hub is harnessing that experience and that knowledge from East London to help support and guide other cities around the world, particularly in low and middle income settings, to not only establishing inclusive design frameworks of their own, but also how to implement them.

Now part of this work is a research on our UK Aid funded AT2030 programme. As you can see in the slide, I will read it out: AT2030 tests what works to improve access to lifechanging assistive technology for all. It's a £20 million programme over five years to support solutions to scale. It will reach 9 million people directly and 6 million peopleindirectly. Driving a lifetime of potential, and it's operational in 15 countries across Africa and Asia. We have a subprogramme called Inclusive Infrastructure as part of AT2030, and our lead researcher, Mikaela Patrick, will introduce that work to you later on, along with two of our incountry delivery partners. So I hope that helps set the scene for what we'll be discussing over the next 50 minutes or so. And I look forward to all your questions and comments as we go. Thanks.

Speaker 1: Louise Gebbett

Thank you very much, lain. That was a really fantastic introduction and an overview of what inclusive design is and why it matters. So we're now going to be moving on to hearing from Peter Carr, so Peter I shall hand across to you and let you introduce yourself and a little bit about your experience and your area of knowledge.

Speaker 3: Peter Carr

Thank you very much. Welcome, good afternoon, well, it's afternoon here, on the sunny Norfolk coast, no doubt spread different places and different time zones around the world. My name is Peter Carr, I have got over 35 years' experience in the construction and property industry, but the last 15 years has been specifically on the accessible side.

In 2008, I was invited to join an advisory panel for the 2012 Olympics so that we could make sure that we were really pushing the boundaries up in terms of accessibility, inclusivity and everything else like that. And I have carried on that involvement into other sectors, including stadium design, housing design, and still working on the Olympic Park, to try and include as much real accessibility design as we possibly can.

We all talk about inclusive, it's a great word, so I thought, I'll have a look into the dictionary and see what the definition is. There's a wonderful long-winded one, which I will read, which is: "aiming to include and interrogate all people and groups in activities, organisations, political processes, etc, especially those who are disadvantaged, have suffered discrimination or are living with disabilities."

Now, typical academic speak, it's a lot of words and what does it really mean? I looked further down the page and found a far better definition which was simply: "embracing." To my mind, that's what the whole inclusive design element is. It's embracing issues that everybody has, and it's not just down to the visible disabilities and things like that, it's down to so many issues that people have to try and make their world as inclusive as possible.

As I say, I have worked in the UK and also with some projects in Kenya as well. I just wanted to give you a couple of examples of how I see inclusive design really working. The first example is a school that we developed in the Olympic Park. Unfortunately the school grounds were on two levels, the upper level where the school buildings were, and then there was a lower level where the school playground was, and to access the school playground was this great wide steps, that led down to the playground and the steps could be used also in a way like an outside auditorium as well. So the designers also put in a ramp to allow people with wheelchairs and mobility issues to get down to that. The start of the ramp was at the same point as the start of the steps. The end of the ramp was the complete opposite end of the playground. Now, what this meant is that somebody who was using the ramp went on to the ramp, where everybody else was going down the steps, so it was pretty obvious they were having to go a different route and then when they were discharged from the ramp, it was completely away from where everybody else was. Surely a far simpler solution was to put in a ramp that picked people up where the steps started and then discharged them from the ramp where the steps finished. So that everybody is arriving at their destination together.

The other thing, this was a primary school and rather than just having a straight boring ramp, why not make it bendy and twisty and have different colours in it and different things to happen, as you go down that ramp? Because then what might happen is that some of the able-bodied kids would come down that ramp as well, make it fun, make it inclusive for everybody. And it also makes everybody want to use the things together, irrespective of what their issues arein terms of mobility and things like that.

The second example was in Kenya, the photo on the screen shows the office door on a school in Kenya that I have been involved with. As you can see, it's totally accessible and really good, in the top quality of design that's available and construction! We had a young chap there who was unable to walk at all. When he first went to school, he was six years old. So he was put into the nursery group, and his mum would take him to school in a wheelbarrow, and lift him out of the wheelbarrow and sit him in the corner of the classroom, where he would then stay for the whole day, until his mum came to pick him up from school, put him back in the wheelbarrow and took him home. So the first thing we did, in conjunction with the Walkabout Foundation is we took out to Kenya 200 wheelchairs, this chap got a wheelchair, one of the paediatric ones, suddenly he was mobile, and he could move around. The only problem was that the only classroom he could still get into was the nursery

classroom, and this guy was now ten or eleven, so really, did he want to be in a classroom with other six year-olds? Would his education help him be in a classroom with six year-olds?

So in one part, we had solved his mobility problems, and dealt with the inclusive part but then we have created a bigger problem. However, this was solved by the British Army, who had a base nearby, we borrowed a couple of their guys who came armed with wood working equipment and basically made the door to the other classrooms that bit wider so his wheelchair would fit through it. So the reason I brought this one up is that it's not always about putting big fancy ramps in, it's not always about putting lifts in and everything else like that. This was a simple solution to a relatively simple problem, and I think sometimes designers, especially in this country, and also owners of properties and things like that, see what's impressed upon them by the accessibility regulations, as suddenly being expensive things; it's not. It's simply about application.

The whole thing, I think, is it's about looking at needs, it's about the environment, both physical and also the social environment as well, and then the application, it's making the application relevant, efficient and economic and also having the minimal impact, so it's not something that stares you in the face. I think what we have to look at is the main thing with inclusive design is for it to make a difference. Ideally, it wants to make everybody feel the same as everybody else, so no, you don't want to have to go into a separate door, a separate entrance, simply because you're in a wheelchair. It's trying to make it, as the word says, inclusive.

But the harder part, I think, is including it into the design process. We have designers who have a very broad spectrum of knowledge of what they're actually designing but often with very little knowledge about what actually makes something inclusive. There are legal requirements, as in the building regulations in the UK, and things like that, but they are the bare minimum standards, and is that really what we should be doing, providing the bare minimum? Can we not just up the game a bit more? There's the specific knowledge, as I said, as to what's needed in accessibility, in terms of how do doorways work better for people. Is it

better to have a sliding door rather than a normal hinged door, for somebody in a wheelchair? How do we deal with wayfinding for people with sight issues? Again we often get a conflict between tools that are put in place to deal with sight issues, such as tactile paving, which to somebody in a wheelchair is the worst thing ever and it's balancing out some of these conflicts to make it right.

One of the things that I have certainly found and continue to work with in making this actually happen are some of the advisory panels that have been set up, as lain said with the 2012 London Olympics and Paralympics, the Built Environment Access Panel was set up. This was a group of people with specific knowledge, experience, who could add into the design process, for both the new buildings, the temporary buildings, and the existing buildings. This wasn't to try and take the place of the specific access consultants that the various design teams had on board, this was really to sort of say, from a client point of view, we just want to interrogate what you're saying, what you're putting forward, I'm not saying it's wrong, but trying to see that it's going to work, that it is going to enhance the situation, also being able to throw in some improvements and things like that. So I think these panels are very important. Again, it's not having a panel that's too big, having a panel that has the right experience, and can work.

This was also something I set up when I was involved with Tottenham hotspur's new stadium where we set up a pan-disability inclusion design group. As a result, I think the new Tottenham stadium is probably - no, not probably, is the best new stadium in Europe, and especially in terms of accessibility. So really, when I look at the next steps of where we need to get to, I think the big thing is about raising the bar. It's something we did in the days of the Olympics. When we looked at the Paralympics and the Olympics, their minimum standards, we didn't come anywhere close to that, we went further than that. So to my mind, it's about the minimum standards are there but they're not good enough. It's having realistic expectations and then it's about implementing it now. Thank you.

Speaker 1: Louise Gebbett

Thank you so much for that, and I think there's a couple of elements that came across really strongly from your overview, Peter, is the importance of embracing but also adopting, across designers and across planners, and across really anyone involved in these large development infrastructure projects, to get the right people in from the off and to make the decisions to do that in an inclusive way. I liked your example of Tottenham's new stadium and how your involvement and a wider group of other advisers has enabled some real success stories in that.

I think also you have really highlighted that sometimes it is simple solutions and it's about doing things efficiently, and doing them correctly from the off that can make the biggest difference. So I'm now just going to hand across to my colleague Mikaela who will talk a bit more about our AT2030 programme.

Speaker 2: Mikaela Patrick

Hi everybody. I am Mikaela and I am an inclusive design researcher with GDI Hub. I am the research lead on our AT2030 subprogramme that is looking at inclusive design and accessible environments in low and middle income countries. I am going to talk a bit about the rationale behind this research, give you an overview of what we're doing in this subprogramme, and also introduce our first case study on Mongolia which has been published today.

So why are we looking at inclusive design and the built environment as part of the AT2030 programme on assistive technology? I think as this image shows, assistive technology users also need inclusive and accessible infrastructure to enable access and participation in society and the built environment. You can see in this image how there are obvious accessibility challenges in the road infrastructure in Mongolia. So in lower and middle income countries, the great need for infrastructure development, such as providing basic access to water, sanitation or electricity, can mean that accessibility can be an afterthought. But we think that inclusive design can help address that accessibility gap.

At the moment, current knowledge and initiatives focus a lot on physical accessibility, such as steps and ramps. Inclusive design has the ability to do more, to go beyond the minimum standards. It's also not clear how much people understand about inclusive design approaches around the world, or how much knowledge they have on how to implement inclusive design. We think that there is a huge opportunity to drive disability inclusion by embedding inclusive design into infrastructure development.

Our research will look to address some of these points through a series of case studies. Over three years, we'll be working in six cities in six different countries, all in lower and middle income settings, and we'll be looking to pick out common themes and global actions so we can build a picture of what inclusive design looks like in different places in the world.

This is because we think inclusive design should respond to diverse contexts, inclusive design should respond to culture, geography, climate and resources. And we want to work closely with local partners, particularly disabled persons' organisations in each country, to make sure that we are working with local knowledge and expertise.

We have case studies planned in India, Kenya, Sierra Leone and Indonesia and we are here today to talk about our first case study in Mongolia.

So we have been working in Mongolia for the last four months with our research partners, IFO, an Italian NGO based in Mongolia since the 90s, and Tegsh Niigem and UniversalProgress ILC who are both disabled persons' organisations. We wanted to understand the current state of accessibility in the built environment in the capital city of Mongolia, Ulaanbaatar, including what barriers people face and what opportunities there are for inclusive design. To do this, we have conducted research with three major stakeholder groups: government stakeholders, who

have decision-making power; industry stakeholders, who play a role inshaping and designing the built environment; and community stakeholders, who are the people that are living in the city every day.

The report has launched today, and it covers lessons learned and recommended actions, and we hope it also captures the experiences of our research participants and their vision for a more inclusive city. On the images on the left, you can just see a snapshot of some of the activities we conducted which included a mixture of remote and inperson research activities.

So before I hand over to our research partners in Mongolia, I just wanted to share two images from our research participants' photo diaries. These diaries were used to document how our participants move around the city, where they experience challenges to accessibility, and where they like to spend their time. In the image on the left, our participant wanted to show how they feel stigma in the built environment, highlighting how awareness raising and a culture of inclusion is soimportant for inclusive design. In the image on the right, our participant is showing how the poor state of infrastructure, in this case roads and paving, is creating a barrier forboth accessibility and assistive technology use. The image also shows how infrastructure and the built environment in accessibility is also impacted by climate.

Mongolia has an extreme climate and in the winter snow and ice and the summer heavy rain create slippery surfaces and obscure things like potholes which creates obstacles for people and can alsodamaging assistive technology, causing AT to require more frequent maintenance or replacement.

I'll now hand over to our team in Mongolia who want to talk a bit more about the accessibility challenges in Ulaanbaatar and also their work.

Speaker 1: Louise Gebbett

Thank you very much for that introduction, and it's very exciting to be launching the first of the six case studies and to really see the breadth and range of countries that are going to be explored in the future. What's particularly interesting is that the information and the research and the findings from this has been collected from a range of government, industry and community stakeholders, and the breadth of knowledge that comes from engaging with all those different parties within these reports.

So we'll now hear from our Mongolian partners, I will leave them to introduce themselves and tell us a bit more about their work. I think they are just setting up their screens and microphones so when you're ready, please unmute your microphone and set up your camera and we're looking forward to hearing about your programme

Speaker 5: Tamir and Nyam-Ochir

Thank you very much. My name is Tamir and his name is Nyam-Ochir and first of all we would like to thank GDI Hub, Universal Progress ILC and TegshNiigem. Today I am going to introduce our research, which has done past four months.

Accessibility barriers in Ulaanbaatar. First of all, city was planned without including persons with disabilities' issues, from the beginning. And also policymakers have nounderstanding about inclusive design. Their attitudes towards disability are mostly based on the medical model. Due to those reasons, the physical condition of built is one of the main barriers for people with disabilities to participate in society.

The research on inclusive design. The lack of relationship between different government agencies and organisations for law and policies, for example, we have different sectors with different laws but those laws and policies are not related to each other, so that was the one problem. And we have seen some attitudes during the research, the government - most of the stakeholders are engaged in at least some plans to create a more accessible city. For example, in Mongolia, we are going to have a law on accessibility soon, so it shows awareness of people are getting better and better. People are realising that inclusivity is not just for people with disabilities, it is also for everyone.

Here is Nyam-Ochir. Universal Progress independent living centre is the first independent living centre in Mongolia, founded ten years ago. It has over 140 members withdifferent types of disabilities. Our purpose is to change public awareness of disability from the medical model to the social model, and advocate for the independent living concept. And to empower people with disabilities, and to create a more inclusive society.

I am working as an accessibility assessor, my main duty is first assessing the built environment, for example, toilets, ramps and spaces, etc. And second, consult and give recommendation on the accessibility to companies and organisations. Third, drawing engineering drawings for accessibility to the companies and organisations.

Speaker 1: Louise Gebbett

Thank you so much, it's fantastic to hear from our Mongolian colleagues about some of the work they have been doing, and just to understand the context of this case study and the wider environment in Mongolia currently - with quite a low understanding of inclusive design, but actually, the awareness is increasing and through programmes like this and through other work happening on the ground, there is some real strides being made, and people are recognising further the importance of these areas, and that actually all of this work will really help build that and build momentum around inclusive design, particularly in these areas where it's so important and so valuable.

I will now hand across to our colleague Nina from Kota Kita, I will leave you, Nina, to introduce yourself a little bit more and tell us all a little bit around some of the work that's currently happening in Indonesia.

Speaker 6: Nina Asterina

Thank you. Hi everybody. Kota Kita is a non-profit organisation based in Indonesia with expertise in urban planning and then cities and participations and then we are working in the design and development of the cities. We work in more than 20 cities in Indonesia, focusing more on governance and climate change resilience and inclusivity, but in this session I want to explore more about our works on inclusivity in the city of Banjarmasin, in Indonesia.

OK, so just asking why inclusivity, because we believe that our work that everyone should have access to opportunities to reach their potential to the fullest, because many times people are left behind in the city-making process, so not everyone is getting their opportunities to live in enjoyable cities.

Our research found that there are still some barriers to meaningful participation for people with disabilities in Indonesia, the first one is the policy language is not translated into operational words on the ground, making the city's implementation having inconsistency in the local context because most of the time it depends on the political will and the commitment of the local government.

Then the second one, furthermore, there is no segregated data on disability, with figures varying across the official agencies. The documentation results in missing opportunities for disabled people in the cities, like social assistance, political participation and many more. And then the third one is the connectivity of accessible public infrastructure is fragmented and often piecemeal, because in many cities, we can see the inclusive design limited to the city centre, but leaving behind the disabled people who are living in the heart of the cities.

The fourth one is the implementation of accessibility measures often fall short of universal design standards. For example, like you see in the pictures, there is a need from the city to provide guidance for persons with visual impairment, but then it hits the trees and then across to the river which is more dangerous for persons with disabilities living in the cities. So Kota Kita has been working on inclusivity to support the city's development, being inclusive for people with disabilities, and vulnerable groups. In Indonesia, disability data is often outdated, to be useful for the effective planning and policy-making, that's why we are concentrated on more inclusive data collection, utilising the technology based data collection with a participatory approach.

Kota Kita has been implementingdata collection in the city of Banjarmasin and this has resulted to map 3,897 persons with disabilities living in 1,657 blocks in the cities. So by doing so, it resulted in twice the numbers from the official government data, and then our finding has created more inclusive planning policies.

In the inclusive city, we need to recognise that the power dynamics in the community, the vision of the inclusive city is very important to recognise also the power dynamics in the community because the persons with disabilities and the elderly are often left behind in the policy making process. In our AT2030 research programme, with UCL, we tried to engagemore with the persons with disabilities and the elderly to build the creative, inclusive space for the articulation of ideas and aspiration, ensuring no one left behind, to create a more efficient and more inclusive city.

And then taking more our commitment in profiling the inclusive environment in the mobility for all, because we realised that 45% of the persons with disabilities in the city of Banjarmasin never travelled, like they never left their home, so in the picture we can see, what if we build the world that's accessible for all, not only providing access for personal assistive technology like a wheelchair, imagine the person in the centre, he modified his motorcycle so that he can get to work, and take his family, but then again, what if we do more, like we collaborate and get free wheelers in Indonesia, and we also join with the university design team to collaborate into the three-wheelers, allowing persons with disabilities becoming the driver and then also create the inclusive environment system that isa llowing them to take more persons with disabilities into the accessibility. So last words, imagine what we can do together, something even from the small, to create a better city, Thank you.

Speaker 1: Louise Gebbett

Thank you so much for that, Nina. I think it's really fascinating just to understand all the different elements at play. From the challenge of a lack of data, through to policy language, and the implementation of that policy on the ground, and then the impact of politics. Another area that you mentioned, that I think comes up quite regularly, is around the fragmented infrastructure and the challenge of the different parts of the city, and design being implemented in different ways, in different areas, so I think that will really highlight some of the real challenges of inclusive design, but also some of the potential.

And as you said at the end there, the volume of people, particularly within your example, that actually aren't moving beyond their immediate area and aren't travelling, shows the impact that inclusive design and infrastructure around inclusive design can make, not only to those people's lives, but also to the economy, and to education, and to all the different areas that then also feed off that.

So I'll hand back to my colleague lain, to give a little bit of a summary of what we have heard today, and what you think the priorities are moving forward.

Speaker 2: lain McKinnon

Thank you, Louise. So thank you to everyone for taking the time to speak today, it's been great and I hope all the attendees have found it really interesting and helpful. And also thanks for the questions that have been coming through, I have been doing my bit to answer some of those. In terms of priorities, I would probably reflect what some of the questions and comments that have been made. I always think about priorities in kind of the short term, but then also in the long term. For me, the long-term priority is about really good education and training. I have said that for a while now and I believe it's true. We want to get to the point where I would hope, as I said in my introduction, those designers and decision-makers coming into the industry really understand and have had at least some grounding in inclusive design and the principles and the methodology and the mindset that influences their work, when they grow into their respective industries but I appreciate that is a long-term goal and will take significant resource and energy to get going.

We're doing our bit on that, both on the academic side and on the education and also on training. Short-term, I think there is also a need for better understanding. I think where things fall down often is implementation, that's something that Mikaela has found, that's come through her research, work so far, even in places where maybe good policy exists, or even in some places good standards exist, the mechanisms for really then implementing that fall down. So for now those are two key points I would make, both short-term and then also thinking more long-term

Speaker 1: Louise Gebbett

Thank you lain and as you have said we have had quite a few questions come through on the chat box and also the Q&A, particularly asking around how can companies really understand the value of all this, and I think that probably spreads beyond companies, to policymakers and obviously designers and all the different other stakeholders who are also involved in this process. We've also had quite a few questions around that idea that actually there are some very good examples of good practice and guidance, and guidelines, but how can they be best adopted? So I think it would be good to come to you, Peter, just to hear about what you think are the biggest challenges and what might be the best mechanisms to overcome some of those? Just to start to see how some of these areas can be implemented.

Speaker 3: Peter Carr

Yeah, it's a difficult thing, difficult question. I think a huge part of it is education, both professionally and socially. I am never convinced that certainly in the UK, the big educational arms, such as the RIBA, the RICS, the ICE, really include inclusive design as a serious part of their developmentand training of staff. And when you also look at - because all the professional bodies now have this continual professional development element, that's part of their requirement to keep your qualification, again, a lot of that centres around other issues and very little actually comes through on inclusive design. So I think there's obviously the main education part that is vital.

And then I think it is then with owners, clients, that sort of thing, that they understand that it doesn't have to be expensive. I think there's a view, and certainly when the DDA rules first came in in the UK, and in the US, there was this great fear that, "Oh, we've got to spend thousandsputting lifts in, and changing this and that", it doesn't have to be expensive. It just takes a bit of thought and a bit of application. Yes sometimes it's thinking outside the box, but it's just really trying some things, and seeing what's right. But if you could do that in conjunction with a team such as the advisory panels that we set up, that will make a huge difference and it makes it very relevant as well.

Speaker 1: Louise Gebbett

Thank you, Peter. So I think it would be really interesting to hear how that then applies on a more global scale, so I guess from the team in Mongolia maybe, we'll come to you and just find out what you think you would say are the biggest challenges from a local level, particularly based around the case study, and if they apply on the national scale, and how you might see the mechanisms to start overcoming some of those challenges.

Speaker 5: Tamirhuu

About the problem, people with disabilities, one of the big issue for inclusivity, and also the legislation, also one more, another problem, because in our regulation, there is one regulation - but some regulations but they cannot be used for every place. It just can be followed or unfollowed, it's up to them, who are going to build the buildings or roads or anything. So the regulation and awareness of disability or accessibility is one key issue for when we were doing the research.

Speaker 4: Mikaela Patrick

Just to add on that, I could include an example we found in the case studies - one of the big barriers to implementation, to implementing inclusive design, we found in Mongolia, is that the current process through which buildings are approved means that buildings are only assessed by people with disabilities once the building has already been built.

A building design goes through two stages of approval, one at a kind of planning stage, before it's built, and one post construction. But people with disabilities are only assessing the building once it's already built, which means that it's more expensive and more difficult to make those changes. If you can change the system and embed inclusive design and accessibility measures from the beginning, you will have a much better decide and much better process as well of embeddinginclusive design.

Speaker 1: Louise Gebbett

Thank you, Mikaela, that's really interesting. And I think what comes up from your response there, and also from the team in Mongolia, and I think it's something that's echoed in the Q&A box – is the challenge of enforcement, and end users really only being considered at the very end of the process, once buildings have been developed, so not getting that diverse input from the off. And actually some of the challenges around that, that have been mentioned in the Q&A, are around developers and the relationship between developers and designers and where

sometimes inclusive design just doesn't hit their radar, until much later on in the process.

So I think it would be really interesting, Nina, just to hear from you around if it's similar challenges, as we have heard from Mongolia, in Indonesia, around the end users and the diverse input not happening until later, and whether you would also see education and cost as being a real challenge in implementation?

Speaker 6: Nina Asterina

Yes, so like in Indonesia, the cities are consulting with representatives from the persons with disabilities organisations but then again, in the construction process, they haven't been involved directly to the process, so that after the evaluation, it still hasn't met the standard of the universal design.

For most of the time, the construction's technicians and everyone thinks that the accessories of the universal is only those that are visible, the guiding block is the yellow stripes in the street, something like that, so although the ramp is already provided, it's usually not accessible, so this is very dangerous situations in the cities of Indonesia, because if one designer and then all these people, all these stakeholders, haven't been collaborated from the policy-making process through the implementations, like there is a missing step there, it's going to be really hard to establish the inclusive cities.

So it needs a more careful consideration and then very attentive attentions from each one of the stakeholders to involve everyone in the discussions to share what's needed to be done and then to follow up again with a monitoring process, until it's established, the good one, the accessible one, because it's going to be like wasted money if you provided all the guiding block and on the ground it isn't accessible.

We think the first thing to be done by the government, all the stakeholders in the city, is the mapping of disability, because if you just

provided the ramp, but what if the persons in the city is having no physical disabilities or something like that, or this is not something they want to be accommodated for their needs? You should consult with them, from the planning process, and involving them to the end. I think that's it. Thank you.

Speaker 1: Louise Gebbett

Thank you, Nina. We have also actually also had a question come through in the chat box around how you went about the mapping process, and people are saying that's really interesting area of work, I don't know whether that's something you can just provide a very short summary of how you went about it?

Speaker 6: Nina Asterina

NINA: We did participatory data collections for disability in two cities in Indonesia, in Surakarta and then one city, it's the one that I presented to you, it's the city of Banjarmasin so it's two in different provinces.

The process was involving volunteers. It can be contextualised with the cities, we are addressing the mothers and the youth in one city, but in Banjarmasin, we asked for volunteers with university students who have been familiarised with the data collection process, so we gave them the training, using the data collection, using the technology, like A, dica, because we realised that poor data collection, usually using manual data collection, and then at the end it's resulting into data entry error, that's why we used a simple Cobocollect. We explored the question from the Washington group question to assess the disability aspects, and before going to that, we also collected secondary data from the official Government Offices, like Department of Social, so we gathered all this list of the persons with disabilities in the cities, but then we compared them going to - like a census, like door to door interviews, like having disabilities, and also we equipped them more with the questions related to the accessibility including like the ownership of the assistive technology, something like that.

So first of all, we are always using the first line information to set the guideline first and then we trained the data collectors to be more.

Speaker 1: Louise Gebbett

Fantastic, it's really interesting, just getting a bit more of an understanding over how that process works. We have another question come up that I believe has been answered in the chat but it would be good to answer it verbally as well. We had a question from in from an architect working on large scale projects, both in the public and private sector, asking for insight on how is the best way to create positive progress and how architecture should look to access client side and users and make sure they get that diverse input. Peter we'll maybe come to you, just to give a bit of an overview of what you would say the priorities are from an architect's perspective, for example, starting out on a big project and how some of these challenges can be overcome.

Speaker 3: Peter Carr

Yes, it is difficult, but I think the biggest thing is to make it part of the project right from the very start. You look at most project developments and the whole concept of inclusive design doesn't come through until quite a long way down the line. Usually the detailed design element. To my mind, it should be in the initial feasibility study. So that it can be addressed by the architects, by engineers, and by the cost consultants, so the cost of providing this is there from day one.

It's also part of the project brief, especially from educated clients, I spend a lot of time working in the university sector, we were a big client at one point, and it's important that clients such as that, where you have qualified people in your team, do actually put forward and say, yes, we want a building that aesthetically works right, that meets these functional requirements, as well as being properly inclusive, and it's not just the minimum of what the building regulations want, it's taking it a bit further and just making it part of the design. If you look around, there's some beautiful architectural designs for access and things like that, that have been done so well, and make an architectural statement. It doesn't have to be fairly sort of institutionalised or anything like that.

I've done a number of domestic projects, for example, where there's only been one grab handle in the whole house. Everything else works for the person in that house, but other people live in the house. And it's not just designed around the person with the mobility or any other impairment. That other people live there. So design can be done, it can be done in a very, very tasteful way.

Another classic example is our wet rooms. You can do a really nice, very attractive wet room, that anybody would want in their house, rather than doing something that's got brown grab handles here, there and everywhere and looks like a care home.

But going back, it's a big education process. Certainly in the UK we need to get into people like the RIBA so they can start pushing it. The same in the US. And the same around the world. I know that again, through the Kenyan process of employing architects and that architectural education, there's a big education process to go with that, and I think it's actually getting programmes out there, especially through online education processes and such like, to really push it, and make it a very vital partof a designer's education. It's not just architects, it's engineers, it's interior designers, it's shop designers, office designers, the whole lot. Really to make it inclusive, because if one person can't - one designer can't necessarily solve the problem. It could be solved by somebody else. So it's looking at it. And that also helps to improve the social inclusivity as well. Which I think is as vital a part.

Speaker 1: Louise Gebbett

I think what's really interesting, that's come up through this discussion, but also through all the presentations, is that balance between culture and education and practice and policy, and how they all kind of intertwine and are really valuable within this discussion.

lain, I'll maybe hand across to you, I'm aware we're coming to the end of the session, so it would be good to hear any final reflections you have on what's been discussed or what you think people should take as going-away points around inclusive design and the priorities moving forward.

Speaker 2: lain McKinnon

Yeah, thanks Louise. I think it has been a really good conversation, good questions, and I suppose it's one of those ones where you feel kind of reassured, because a lot of the questions that are being asked are questions we ask ourselves, and as highlighting things that we are discovering and through our research, but then on the other hand, these are the key challenges that we really face, that we really want to tackle and help solve, I guess, and challenge.

Reflections for me, we have spoken a fair bit about education, that's clearly very important across the board. We have spoken a bit about implementation and not just having the policy and the regulations and the guidance in place, but how that's then implemented. We have spoken a bit about the importance of involving, genuinely involving disabled people from the very start of the process. Getting in there at the start of a project, as Peter just said, as has been reflected elsewhere, is vital and if you can cost it from the startof a project, your budget profile might change but I am of the school of thought that your overall budget doesn't necessarily need to - the profile will, perhaps, yes, obviously it's on a case-by-case basis but I think you do it early, you embed it from the project brief, and I'm of the opinion there's no real excuse for not doing it.

There's always a way to do it, and achieve an end result that, as I said at the start, gives this positive experience to people. It's about your experience of using a building, a place, the world around you, you're creating positive experiences for everybody, that's what's important to me.

Speaker 1: Louise Gebbett

Thank you very much lain. I am just going to quickly finish off with updating on our next webinar, so let me just get this on my screen. First of all, our Mongolia casestudy, as has been mentioned, is launching today. It's available on our AT2030 website, and it's a really interesting document, lots of detail, a lot more depth around some of the areas that have been discussed today and some real highlights around priorities moving forward and implementation.

Our next Disability Innovation Live session, we'll be looking at country capacity assessments, so that is really looking at how we can support country governments globally to address AT access, highlighting where the challenges are, and how some of those can be addressed to really get AT to people that need it on a global scale.

So that session will be on 19th November, so we'll be sharing some more detail around that, and I have also noticed, throughout the chat today, there has been quite a lot of people asking for some more information on some of the upcoming case studies around inclusive design that were mentioned by Mikaela at the start, so we'll share some more information on that work to everyone that has signed up to the session, and also the links when they are live to the transcript and the recording so you can come back and watch again, but also find out a bit more about what the next steps are in these case studies so you can get involved as well.

I also just wanted to mention that the Global Disability Innovation Hub delivers our own MSc in disability design and innovation and as part of that, Iain, who has been leading some of the discussion today, has a module itself on inclusive design. For us, it's really important, the education element, that we have developed our own MSc programme, to really build in inclusive design to the learning and to the creation of the next generation of pioneers within disability innovation.

So that's all from Disability Innovation Live today, thank you so much for joining, and a huge thank you to all the panellists that have joined the session today, and talked so much about the work they are doing and the different environments they find themselves in, and I think it's fascinating for us all to see that perspective. And also a huge thank you to everybody that has joined today, I know there are people from all over the world, hundreds of you, that have joined us, so thank you for that. As I said, we will be providing some more information, in case you want to read more, and a big thank you also to the BSL, captioners and closed captions for all your support today. I hope you have enjoyed the session and do join us in November. Thank you very much, goodbye!