# The Inclusive by Design webinar - Accessible wayfinding: removing barriers and enabling inclusion with BindiMaps Transcript

TOM: Happy Wednesday everybody. I can see we have numbers and people coming online which is wonderful. Welcome to inclusive by design. And really excited to have a conversation with the wonderful Dr Anna Wright shortly. We are just waiting, giving a few more minutes whilst people jump online. Please relax, grab a cup of tea, grab your lunch and we will shortly kick off. For those just joining in. We're waiting a few more minutes before we start this webinar. I hope everyone has made it through, Wednesday midweek. For those of us in Victoria we have a short week this week with the football match on Saturday. And again just want to thank everyone for joining us. I think given the timeframe, it would be wonderful to start, I believe.

So, okay. Thank you for joining us. It's Wednesday, just after 12.30. I know it's your lunchbreak or it might not be but thank you for your time, it's very precious to us. We're here with the wonderful Dr Anna Wright of Bundy maps and we're going to have a discussion around wayfinding and in particular the wonderful work of BindiMaps. I would like to acknowledge the Indigenous Australians as the traditional custodians of the land on which we meet and their continuing connection to land, sea and community. We also pay respects to the cultural Elders of Indigenous communities, past and present. I'm in Melbourne. Again want to acknowledge the Wurundjeri people of the Kulin nation. It's a beautiful place to be and we're lucky to be here. I'm sure you would like to acknowledge the traditional owners of the land you are all on. It's exciting we're all here. We have over 150 people and counting. A few bits of housekeeping. My name is Tom Bevan, Australian Disability Network dignified access lead.

Particularly staff members with a disability or those looking to start working in those places. So I'm part of the consulting team. And the agenda today, we're going through a bit of housekeeping. I will introduce Dr Anna. And then we will have a discussion -- I say discussion but I'm really excited to listen and hear what Anna has to share with us and the experience of BindiMaps in terms of wayfinding. With that in mind there are some more housekeeping notes to go through. We should go for about half an hour. We welcome questions. At the back end of this webinar we will look to answer any questions you might have submitted and if we don't get to them we will follow up later on. I has clarify as well we have live captions. From the wonderful -- and wonderful interpreters and Danielle and Kim and Donna supporting with the captions. And Danielle and Kim -- we will record the webinar. There will be a transcript we can share with you a bit later on as well. If you want to have a chat or -- feel free. This is a discussion. We would love to hear your ideas and questions. We will be monitoring that. We can try to answer some of those at the end, in the back end of the session. If we don't get to them we will share an FAQ after the event. Of course if there are any technical issues we will try to help with those as we go. I want to note as well we will be sending the recording with the transcript of today's discussion. I have introduced myself. As I said I'm the dignified access lead for Australian Disability Network. Again I get to enjoy working with all of our members, all 450-plus of them. I get it visit their places of work and look at -- in terms of the social model of disability where it's the environment that needs to be managed and looked and designed better. I get to do that with our members. A key part, a central thread of all of that is wayfinding. That leads me to introducing Dr ana Wright. Thank you for being patient. Anna is the CEO and co-founder of BindiMaps, a digital indoorway finding platform that helps navigate indoor spaces -- whether you walk, roll, whether you can see or not. BindiMaps has been going since 2017. Again this is amazing, global champion at the UN world Summit awards in 2023. Anna, who I have touched base with on numerous points is a hugely passionate advocate for inclusion. Takes technology to drive that inclusion. And certainly is a prominent leader in start up as well. She is an inspiration. We are really lucky to have her here. I would like to introduce you to Dr Anna Wright who is going to introduce us to wayfinding.

ANNA: Thank you so much Tom and thank you Australian Disability Network and everybody who is here for giving me your time and attention over the next half hour while Tom and I riff on some of our favourite subjects which is around disability, access and inclusion. Thank you for having me. We thought what we would do is have more of a discussion rather than death by PowerPoint. I'm an ex-academic so well familiar with death by PowerPoint. I thought I would spend a bit of time setting up the problem space around what do we mean with wayfinding. Then I will talk about standard wayfinding and introduce you to the work we do at BindiMaps. It's a shortening for "be independent". That's what we are all about, we started as an app for people who are blind or low vision, very quickly found that people get lost in work is spaces, shopping centres so we have built out our solutions to be inclusive of everybody. I like it Tom, the definition of why you walk, roll or whether you can see or not. This is still in development but we are currently also exploring sensory sensitivity, wayfinding options. So people can again select what sort of sensory sensitivities they would like to avoid. Let's back it up a little bit. Let's just define the problem space of what we're talking about. And understanding wayfinding -- it's something we all get frustrated with and also take for granted a little bit. If you look at wayfinding as a theoretical piece, they say there are four main parts to way finding. I sneak in my fifth sneaky one. The first they talk about is orientation, you know where you are, so you know your starting point in a space. The second one is the route decision. So where do you want to get to and what are all of the different pathways you could take to get to that point. the third part of wayfinding is staying on track as you move or being able to check that you are on the right path, that you haven't taken a wrong turn, so route monitoring. The first one is destination recognition. How do you know when you have arrived at a point. those are the four key ones in the wayfinding literature. The one I like to add in -- this is my personal problem -- the fifth one is being able to get back to your starting point. the number of times I have lost my car in the car park at a shopping centre or hospital especially if you are already stressed -- I would like to add a fifth one that you can also find your way back to your starting point.

Both our 5 key or fourth plus Anna's fifth key challenges with wayfinding. Then because we are here at Australian Disability Network what we should be talking about with wayfinding is why does this particularly matter for people with a disability? What are the existing solutions and what is missing? This is, Tom, where you can probably jump in and make sure that I don't forget anything. What I would like to say, for people with a disability we already have a level of anxiety, a level of additional complications. If we take for example one of those points, the second one, choosing your path, if your path needs to avoid steps, stairs, escalators potentially because you have limited mobility or you are in a wheelchair you have standard paths you can take and probably standard signs on a wall don't indicate whether or not a path is wheelchair friendly. So you have that complication that gets added. We also have other things that help people with disability such as braille signage. Braille signage is amazing but I challenge all of the sighted people in the audience: If you are blind how do you even know the braille is there? So braille is a really great -- when you get to your destination you can check you were actually sent to the flavour of bathroom you wanted to be sent to but as far as a wayfinding technique, it's really just information about where you have arrived, if you can find it. Tom can agree with me, it's not always put in the best place, either. If you want to follow on Instagram there is a thing called braille fails which can be funny but also very distressing, where braille signage gets put. I would like to suggest that that way find something important to everybody and in particular it's important to people with a disability that all of the options are available for them. Back to BindiMaps, we want everybody to be independent in the way that they can travel around a space. Not reliant on volunteers or random strangers. Tom, what would you like to add around your work?

TOM: I'm happily sitting here listening to everything you are saying and it's spot on. What I love is that it runs parallel with Australian Disability Network, that work, and also what we have seen out in the workplace. Again we're tying this to the workplace. We have looked over 100 buildings in the last few years. Wayfinding is something that is possibly not really included in our workplaces as best as it could be. Just arriving even at a premise, a workplace, whether it's for a meeting, an interview, the signage there to tell you that there is an accessible path doesn't exist. I live with anxiety. If I didn't know that path was there then I'm worried, how do I get in? Will I get in? Do I need help? I want to be independent. Spot-on, Anna. It's a really important part of our workplaces.

ANNA: Thank you, Tom. I would also like to add that when we're talking about signage it's probably predominantly written in English or there is some iconography there. We also have to recognize that in a multicultural society English on its own is not necessarily being inclusive and well coming of all people. This is a limitation when we have fixed signage in a place. There are other cool things that people with put in around

-- Tom and I have talked about this -- different floor surfaces and other things help indicate but they're not going to work for everybody. I suppose what Tom and I are trying to stress is with traditional wayfinding even when it's done the best it can be, it's still not potentially as inclusive as a digital solution can be which is why we started BindiMaps and why we're here talking to you today.

TOM: I was going to say, could you share with us the origin story of BindiMaps. You have articulated the problem. How did you come about wanting to find a solution? We would love to hear that had.

ANNA: Thank you, Tom. I have a very rare retinal condition. I should be already completely blind. I have a brilliant surgeon and he has been able to retain most of my usable sight in one eye. While I do have limited vision especially in low light, I am still fairly independent in the way that I can move around space. But when you are diagnosed with something like that I was put straight in with Guide Dogs and you get taught orientation and mobility skills. I was working as an academic at the time. Good news and bad news. With screen readers and the other wonderful technology we have I would be able to do my research and classes. Where I actually had a meltdown was at the major central train station, if you any of you know that in Sydney. I was like, "Seriously I have to learn to count my steps or even worse I have to feel my hands around the walls to try to find the braille to find my way". I thought there has to be a better solution. We can use Google maps outdoors and Apple maps but it all disappears once you go indoors. That was where it all started, was with a major level of frustration and me going, "Well, if no-one else is going to fix it, I will fix it".

TOM: Great innovation comes out of frustration, Anna. Again, next steps. BindiMaps worked with infrastructure that you needed to put in place. Can you start there and show us how that's developed up until 2025?

ANNA: Absolutely, Tom. Thank you. Again on a technical point of view -- when you are outdoors you are using GPS to get your localisation. Localisation is just the term we use to say that your phone knows more or less when it's GPS, it's to about 8m but more or less knows where it is in space and then there are sensors in your phone that knows more or less where you are facing in space. GPS degrades very quickly when you go indoors. One of the first things we needed to solve with BindiMaps was how were we going to localise indoors? Our original solution which we have since moved away from -- we needed to use blue teeth beacons. They were infrastructure. Which means it's expensive and it means somebody needs to come out. The BindiMaps today though -- what we wanted to do was give employers and people with spaces a really quick cost-effective and easy way of creating localisation and creating wayfinding indoors. So we are now completely infrastructure-free. We effectively take a video of a space and it's like we create a digital pin of the space and that help was localisation. That localisation gives us about 30Cm of act accuracy indoors. It's a bit of overkill if you can see but for somebody who is blind or low vision it gives a lot of reassurance about exactly where you are in space and which way you are facing so you can do those journeys. BindiMaps as well as changing the tech stack that goes into localisation, we have also increased our product. I saw on the chat that pops up, which is fantastic, that somebody was also talking about pre-planning their journey. We have a product suite now. We have Bindi Web, are a web based solution that gets embedded on web sites and you can go on that and pre-plan your journey. You can see where the public transport is and see where the Uber stops are. You can pre-plan which bathrooms you would like to use and know exactly what your journey is going to look like which is super important for people with a disability especially around managing anxiety. Hospitals we have worked with and we have talked to the volunteers at those hospitals are delighted because they say they will have people that come to the hospital days before to practice the routing that they need to take with their workers or with family members. So we are just saying you can do all of that from home on your desktop. Then we also have a kiosk product which is basically the web product that will sit in any kiosk. For people running venues that have kiosks we can embed our software into that. The kiosk has got a QR code that will hand off to the app. BindiMaps you can use on your phone or via the app which gives you the very particular localisation in space. But back to your original question, Tom, now we are away from having to deploy any infrastructure, it means we can deploy very quickly and very cost effectively so everybody can have this cutting edge digital wayfinding in their spaces. For things like visitors that will be turning up you can pre-send them the link to -- like the information desk they need to go, the reception desk or meeting room. For staff they can know exactly where things are in the new or revamped workplace. We have 140 different languages. People can translate into which are languages they would prefer to see. It's about really including as many people as possible into a wayfinding solution. even though we started as a solution for people who are blind or low vision and then moved on to broader disability groups our major use case is for people who don't identified as having a disability at all. Even in workplaces, Google Calendar invites or Outlook invites you can set the actual meeting room and people can click on that to get the wayfinding into their space. We find that it is -- it's everybody that uses the product. Everybody gets lost. That to us is really exciting because I think the design should work for everybody.

TOM: I love that. We talk about good access is good for everyone. Clearly good wayfinding is good for everyone as well. And application in the workplace is fantastic. Technology is definitely advanced access in such a wonderful way. Big area right now. It's something that Australian Disability Network has been asked to look at by members in particular is neurodiverse tee and sensory management. Is that something you are looking at this is that something that can be part of BindiMaps in terms of enabling us to reduce anxiety?

ANNA: Only a month in now we won a prestigious CRC grant to work on sensory sensitivity. If there is anyone in the audience who does have the sensitivity or anxiety -- Tom I will definitely be picking on you -- as we start to do testing and collect data in order to build -- I should back up a little bit. All of our products have been built with thousands of hours of lived experience. So we have partnerships with -- we are the only company to have gold standard in way finding from Guide Dogs. We have very strong relationships with people who have lived experience of disability as we build products. We will certainly be looking for volume volunteers to help us build these products so they are fit for purpose. Tom you are definitely on my list. Anyone else who would like to put up their hand. With all things we have a little bit, test, iterate, a bit more. It will be a while before sensory is in the products. I think we will have the same sliders where you choose wheelchair or not or map mode. We hope you will be able to say, "I might like to avoid loud areas" or -- this is all on the whiteboard at the moment.

TOM: That's amazing. The whiteboard -- you are pushing the envelope on that one as well. Anna, we spoke also about making effective change. Again at Australian Disability Network we're here to change the story around disability and employment. Often I think it's fair to say anyone in this area, in the sector, we don't often a tangible. Difference. You mentioned you have been working with architects. Can you talk about how enabling wayfinding at the beginning of a building project makes a real difference and makes the future accessible?

ANNA: I think it also goes to mindset. It's what you do also. I think a lot of the time people don't even consider wayfinding in their built environment it's just we will put up a couple of signs and she will be right. What I want to do, when working with architects and wayfinding consultants -- to get them to think, "This building is not going to be even out of the ground, ready for use in 5 years, what does a crew smart building in a smart city really look like. If you are saying now that digital wayfinding is not going to be a thing in 5 years I think that's a little naive. I think digital wayfinding is already here and in 5 years it will be what everybody expects. Again I would like to even challenge the audience. We are so used to getting lost indoors and having a really awful experience when we go to somewhere new, we're so used to it we don't even think about it anymore. But imagine you are going to visit somebody in hospital and you get to the hospital -- anyone who has BindiMaps you a notification saying BindiMaps is here. You can turn on your wheelchair accessible if that's your preference. If you are blind you can follow audio instructions. This appeals to my children -- I know there are age brackets. My kids are late teens and don't like talking to people or talking to a volunteer. They much rather be able to go on their phones and by the way can I quote a coffee and bunch of flowers on the way? That's usually the conversation I'm having with architects. As much as we like to go into new builds and be part of the Smart Cities it's also very easy to retrofit BindiMaps into an existing building. So we digitize the floor plans. We just need CAD drawings. We have had things from builders with coffee spilt on them. That's fine. We just need to fill in the space and it's ready to go to help anyone find their way around.

TOM: I love that, Anna. Again ensuring an accessible future is what this is all about. So much of this work also lines up with the work we do and a key thing -- I giggled about this yesterday -- Bindi and independence, whether it's a teenager or not it's crucial. You mentioned the lived experience which is important. We are already at 1:00 o'clock. I did see this coming where we would just zip through time. Are -L appreciate you sharing your time today. We wanted to use the last 15 minutes for any questions. I'm trying to check. We have a few questions. Whilst I look at those I will see -- one question I would like to put on out there which I canvassed from our team, we mentioned good access or good wayfinding is good for everyone. Without giving away any secrets do you have any low-cost ideas that can create high-impact in our workplaces in terms of wayfinding?

We would love to be on Bindi. Have you come across anything that could help in that way?

ANNA: Of course I'm going to plug BindiMaps as being the high-impact low cost way. Hot desks, if we can integrate into a hot desk and begin a Bindi link to where the desk is. If you are blind or low vision do you go into the hot desk? I have heard different things. I have a friend who is with an employer who is blind or low vision. She absolutely hates it. She is the only person who doesn't hot desk. Then she is isolated, she is the "special" one which she hates. And then she is not with your colleagues, who have been hot desked somewhere else.

TOM: That's an interesting observation. Again around lived experience. We talk about how important workplace adjustments are especially on an individual level. I think that's an example again where some access supports or some access solutions perhaps don't meet the needs of individuals. That's when we have to have safe nonjudgmental conversations around what does that individual need or that person with lived experience need? We have a question here about: Are you able to use BindiMaps in temporary locations? For example musical festivals.

ANNA: Absolutely. We're down at Floriard at the moment. You can jump on the website and see an example of Bindi Web sitting there. Anyone heading down to Floriard and play with it in place -- you can also play with it on the website. Especially now we're away from beacons it's very easy for us to do temporary and events, locations, things like that.

TOM: Awesome. I love that technology has advanced to make it easier and cheaper in terms of infrastructure. We actually have used BindiMaps for our events, again a temporary set up but really important to provide those solutions to people who need it. Similar question from Michael, who has asked around even using it in a restaurant setting from tables to rest rooms and back? Smaller journeys?

ANNA: Absolutely. Now we are away from beacons we can do that. When we were at 2m accuracy, restaurants -- and we were expensive for something like a restaurant but now we're away from beacons we can do things. Again talking to friends who are blind or low vision and you are out on a first date and you have to ask your are prospective romantic partner to take you are to the bathroom and explain how the toilet flushes and the sink works is not particularly elegant or independent. That's part of the information -- it's not a particularly nice conversation but Tom you will get this, we talk about how the sing works or how the loo flushes. It's part of your independence and part of your way to do things without feeling around a bathroom stall and that icky stuff.

TOM: Tomorrow only this morning we had a conversation around how important tactile signage can be and how it can literally explain your cubical and where it is.

ANNA: Even for example where it's a full lay out of stalls in tactiles. Guide Dogs at Chatswood has done that really well.

TOM: To creates independence. Great question from Bridy: How often would you update location information? A good example here in Melbourne, the Royal Melbourne Hospital: How is that managed? Are users able to keep track of that?

ANNA: We keep track of that. All of our contracting is with the hospital itself. Fun fact about hospitals: Quite often the signs on the doors are out of date because they can't keep up with signage but digital is much easier. We have a thing called a content management system. We just need to log in and you can change names very quickly, very easily. You can move walls digitally. It's much easier to keep a digital solution up to date than it is to keep your physical signage up to date. It's another benefit of replicating your way-finding into digital. Also things like if an escalator goes out of business, we would get a phone call from the facilities manager to whoever their customer success person is here and we would just put a barrier on that escalator, on that area which means people get automatically rerouted away so you don't even get to go to the escalator to go, "Oh, it's not working". We do a lot of work around road works. If there are road works around venues we can block it off and say, "Don't even try to go down that street because it's awful" and digital is so much more flexible.

TOM: It is incredible. Bindi maps started in 2017. So 2025, in the space of less than a decade the advances you have made with the technology and the application of the support is incredible. Again, the lived experience comes into play here. The examples you have given us, certainly lived experience we have come across, which is wonderful to see the solutions that can be accessible to everybody. We have plenty of questions. A big question which is absolutely spot-on is: How do people reach out to you, Anna. Lots of people are asking: How can we connect? I know we will share information afterwards but would you like to explain the process?

ANNA: Please just email me. I would love to talk to you. If you are interested in get what we do, Anna at bindimaps.com. Please reach out. We would love to talk to you about your workplaces or other places you would like mapped. You said there are a lot of questions we haven't been able to get to. Please reach out. I will get back to you. It would be lovely to hear from everybody.

TOM: I'm sure you will hear from a lot. A really important question and -- which is around privacy and data protection -- is that something that is built into the system? I will try to explain the question. Two data related questions. What privacy protections are in place for users, for example end users potentially knowing the journeys they are taking. Are they logged or tracked? I hope you can talk to that.

ANNA: There are no log ins. We don't collect any person data about people using the maps. We don't know who has done what journey. We do know a journey has been taken. We have dwell times and things like that but all of the data is highly anonymised. The data around the actual space is kept very securely. We are in New South Wales Parliament House. We're in a lot of government. And a lot of large employers. Data and privacy is very, very important to us. Yes.

TOM: Of course, I assume -- it's vital in terms of being safe and projecting as well.

ANNA: We don't scrape phone IDs. We don't even scrape phone IDs. We are very, very careful to make sure that everybody's usage of Bindi Maps are kept private.

TOM: Thank you, Matt for putting a question to Australian Disability Network, which is me, which is nice. I want to clarify, the question is around what else can we could to support and help designers understand barriers and limitations? Yes of course Australian Disability Network can do that. Wayfinding, the work that Anna is doing is a big part of what we do. We look at a holistic approach. That's my role and that's what dignified access is. Dignified access I love. It's our own framework but in particular it says what governs our buildings in terms of the building codes and standards -- they are all about compliance, a minimum standard. We say that's not good enough. We want to push past the minimum and Anna this is what you are talking to as well, we want to develop accessible work premises in our future. So our kids, our teenagers and their kids can all work regardless of their needs. We work with our members to access and review their premises and provide recommendations. We do that similarly off blueprints, concept drawings. We provide training too. But it's working with organisations like BindiMaps that add value to all of our work. Because we learn from each other and the innovation and the new understanding of lived experience as well is vital. Which is why Australian Disability Network is wonderful in terms of our membership and how we can share and work together to build a better environment. One last question I think Anna. I like this one because in my work I am very lucky and privileged to travel around Australia to visit other people's workplaces. I use that airport often. With anxiety. Airports are quite challenging spaces. Weirdly they actually make me relaxed but that's just me. The question is from Sophie who works at the department of infrastructure. Wondering has BindiMaps done any work with airports.

ANNA: We have at the Sunshine Coast airport, so yes. A random one, we have Budapest airport in Hungary who are lovely to work with. That is a whole other story which probably involves margaritas. Yes, we have done work with airports. I think transport hubs are particularly important for good way fining. So, yes, absolutely airports. But more than that we have just started working with Adelaide Rail. We would love to do more work with local networks because again the way I see it is people with a disability -- if people with a disability especially people who are blind or low vision want to go to university, want to go to work they are most likely going to be dependent on a public transport system. We need to get that working to get people into their studies and then into their jobs. So absolutely, we would love to be talking to more public transport.

TOM: I think that's fantastic. This is another coincidence, but this morning on my way to work, it's something we find a lot, looking at access where we work but we do a lot to get to work in the first place. Wayfinding is important in that journey. This morning my journey to work which normally takes 20 minutes took two hours. I'm having a rant sorry. It was because buses replaced trains. Wayfinder became hugely important. So catching a bus, where do you get it from. I won't name names. It's obvious I'm in Melbourne but it's just signs with arrows pointing in all sorts of directions. It can be done better and it is being done better but that's an important area as well. It's not just get getting around at work. Often to get to work we have gone through many barriers already. One minute left. Thank you again so much for your time. It's been wonderful listening to you and having this conversation.

Lots of questions that we will share and work through. Last word -- over to you.

ANNA: I would like to say.

TOM: Putting the pressure on.

ANNA: Thank you, Tom and Australian Disability Network, thank you to our Auslan interpreters and thank you to everybody who has been listening. I look forward to continuing the conversation and seeing how we can make our world accessible.

TOM: I said it was the last word. I'm going to get in, it's just a thing. Thank you, Anna. What you have done for access and inclusion over the last 8 years or so is incredible. The accessible future is looking bright. Thank you for your time, everybody. Enjoy the rest of your Wednesday. We have contact details and will reach out with the transcript and video. Have a great rest of your week. thanks, everybody.