



## Take on Board

# Transcript – Fiona Kerr

Helga Svendsen 0:00

Today on the Take On Board Podcast, I'm speaking to Dr. Fiona Kerr, about neuroscience and technology in the boardroom. I'm particularly interested to hear if we get to it about AI and how that might impact the discussion in the boardroom as well. But first, let me tell you about Fiona. Fiona is Deputy Chair of the Catalyst Foundation, a not for profit organization in aging and Kindred Australia. And she's also on the boards of two private companies, R for Robotics and Curated which is based in New York. Fiona researchers speaks and consults on a range of topics including the neuroscience of human to human and human technology interaction. Her interest in the science and power of human connectivity has developed over more than 30 years working in a variety of sectors in Australia and overseas encompassing power generation, automotive manufacturing, defense, pharmaceuticals, state government, and creative companies, including Cirque du Soleil. She founded the Neuro Tech Institute and works with business leaders, policymakers, engineers, scientists and thought leaders to investigate how humans shape each other, how technology shapes us, and thus how we should shape technology. The center explores how we can leverage the incredible capabilities of both humans and AI, how it can maintain the human connection in an increasingly technologized world and particularly the last year, and how to create quality interaction and partnerships between humans and AI. I welcome to the Take On Board Podcast Fiona.

Fiona Kerr 1:27

Thank you.

Helga Svendsen 1:27

So fantastic to have you here for well to have me here as we're in your office. Fiona before we dig a little bit more about boards and technology and AI, I would love to dig a little bit deeper about you. Can you tell me your story about young Fiona that tells us a bit about how you got to where you are today?

Fiona Kerr 1:47

Well, it's a bit eclectic and securitas. So I started as an anthropologist, because I was really interested in people I guess. But even before that, I have a engineering father who was an Air Force brat. So I think I was probably about eight, the first time my, my dad put a toaster in front of me and kind of said, well, it's not working, tell me take it apart and tell me how it works. How would you fix it. And

so he really right from the start, it was a case of saying, if you understand how things are connected, then you will start to work out how systems work rather than just what they do. And, and mum was a matron. So the weird thing is I've ended up with, I'm now a systems engineer, as well. And I did a psych degree and put the cognitive neuroscience in there. And I now have one son who's an org psych and another one is an engineer. So it's kind of gone back out the other way. I went into management for about 25 years in those different sorts of sectors. So at about 50, I had been working for years from my own company with CEOs in organizations to create adaptive flourishing companies. And I noticed some trends around some really got it, you know, why does some build companies that adapt? Well? Is it what they do? Is that how they think? It turns out to be both. But I went back to do as an engineering PhD at 50 on it must be around building complex adaptive systems. That is, but it's also around how people think. And so because I was also looking at people's brains, I ended up looking at sort of machine systems and kind of the wit systems of our own brain and didn't really think about the fact that AI was rising in the middle of both of them at the same time. So with that strange mix of qualifications, but also a lot of experience. Here I am.

Helga Svendsen 3:39

Well, strange, but incredibly useful mix of experience and knowledge around these things. And as I say, particularly given the last 12 months that we've had, we're recording this in gosh, where are we, it's the end of January 2021. Now, so our friend COVID-19 has been with us for basically 12 months, which means many of us have got much more used to technology over the last 12 months than we were previously it's been a crash course in it.

Fiona Kerr 4:04

And often it's because it was so fast. And there's so many limitations. I mean, I adore tech, but I also know the huge limitations, it has not only to do with humans interacting, but also in the tech itself. And so lots of it is not actually fit for purpose for what we've made it have to do. So it creates lots of different issues, as well as giving us really good opportunities as well. So there are always pros and cons. understand them that gets the best out of it.

Helga Svendsen 4:34

Well, I'm hoping you're gonna help us understand some of these. So, you know, you've done so much work around, you know, as you've talked about how people connect with technology, we've had a huge amount of additional technology in the last 12 months. For those in the boardroom. What are your thoughts about how this is impacting the thinking that needs to go in in the boardroom?

Fiona Kerr 4:57

Right. So for that, we need to go back to how do you go about complex problem solving and complex decision making, because at board level, we are having to steer instead of control. And so we're having to get a really good picture. And it's always nuanced. And it's complicated. It's complex. It's both. So the interesting thing about how we go about complex problems is one of the reasons that complex is because there are unknown unknowns. So there's information that we haven't got. And when that happens, the brain basically says, Okay, I'm going to try and re trawl all of my information banks before I have to go out and find new information and actually create new networks. So we are cognitive slots in many ways. And the fascinating thing about human interaction is part of the PhD was really looking at how do you have some people who have very good strategic decision makers and thinkers, because I work mostly with leaders and, and why are some just not, and they quit very linear, even if they're successful and powerful, and they're still linear thinkers. So what happens when you interact directly with another human being is you engage empathy, especially if you're a group that know each other, and trust each other. So boards that are working well together, you have a relationship with other people, you have a level of trust with those people. And you get a number of things happening, you get neuro synchronization from face to face interaction, you get chemicals that we actually exchange in proximity. So we're now up to about 2000 chemicals, potentially, that we exchange in a shared space,

Helga Svendsen 6:45

You get so many questions about that, but we'll come back to it, okay, you're on

Fiona Kerr 6:49

You get all sorts of brain to brain coupling and brain to motor coupling through voice, you know, the voice sits at three to eight hertz, it does all sorts of things when you are talking to another human being. But when you look at each other, there's masses of things that go on with specific neurons. And then the oxytocin, the dopamine, serotonin, all sorts of chemicals. So what you get is an electric chemical interaction that is rich, in terms of the values base that you use for making decisions. So when you have direct interaction, you turn on that emotional engagement. And a large part of that is through direct interaction with another human, then that re trolling that the brain does to do with a complex problem starts to be based on long term thinking. And it starts to be aligned with consequential values. And there's quite a lot of those things that don't turn on over screens. So one of the things we've known for many years about virtual leadership, virtual innovation, virtual decision making, is you don't have as much in the way of innovative thinking and a number of the aspects of complex thinking. And that in the last 12 months, because we've been doing research with the D od and and various kind of groups, that's already shown to have spiked.

Helga Svendsen 8:17

So, you know, for many of us, as I say, the last 12 months, there hasn't been an opportunity for what we are having now, which is face to face interaction, are the things that boards and board directors

should be thinking about that can create some of those things, even in the zoom or whatever it might be environment, to have that rich interaction and rich thinking, when you can avoid having video conferencing or whatever it may be. Yeah,

Fiona Kerr 8:42

I guess the first thing I'd say is, we can go on to how you maximize your sort of emotional connection in a virtual situation. But the step before that, and I'm still working on quite often now, virtually, with CIOs and CEOs, the first step is quite often the discussion around can you do this at all? So one of the projects that we might go ahead with is how often a leader has to be face to face with their team to maintain trust and trust is, we've always known how important it was, but it's even more important in a virtual situation, for all sorts of reasons. So sometimes it is a case of Yes, you could go if you wanted to invest the time and the money as an organization or as a board. And I would say that just like it used to be, um, it's still very much worth spending that time and spending the money on the odd occasion or the rare occasion that you can do that. Because it's fascinating starting to look at things like how often do you have to be face to face to top up that relationship? If you're on a board and you have a new person say that's on boarded onto that board that sounds terrible. So taking into that board, yes, without ever having met the others, the actual neurodynamic have that person with the rest of the board are different. And, and there's some beautiful work already, from years around when you take someone into especially things that are more complex and a board situation is always the more complex decision making. If you see them even just the first time and then you are remote, the level of collaboration is much higher. And when there is a potential for competition or difference in a decision process, that's greatly minimized if you have met face to face and had a high quality sort of interaction. And it is because there are some parts of the brain that are impacted straightaway. And they are connected to socio emotional areas they are in connected to how you start to codify what that how that person makes you feel when you you know, hear their voices see them? Again, some of which translates over technology and some doesn't. Because we could get into the conversation about you know, is the screen better than a phone because you start getting into brain to brain coupling with voice

Helga Svendsen 11:04

Is it better than a phone? What's, what's, what's, better?

Fiona Kerr 11:07

I've had a number of people that were saying to me last year, especially places like New York and the US. Sometimes I just want to pick the phone up instead. Because I feel like it's so much better having this phone conversation. neurologically, quite often. That's right, because that cognitive fatigue that you get on the screen, because of the fact that the brain is trying to pick up all these micro behaviors massively working hard to do that, which don't translate over a screen. No, we haven't got retinal alignment, we haven't got a number of things across screens yet and then allow for a lot of that to

happen. There is some early attempts through algorithms at picking up things like micro behaviors, no, we can't do that right now, we're still very limited. And so it means that the brain is constantly working, because it's looking at the face and saying I should be getting all of this other information. Where is it, and it doesn't stop doing that. So that's a large part of what's wrong. And if you notice, you know, more than three or four faces, forget it. Whereas with the voice, especially if you know the person again, then as soon as I hear your voice immediately, there's parts of the social emotional parts of our brains that will connect. And there's like that comfort level positivism that you get. And when you're then thinking about something which we have to add on, or it can be something that's a bit difficult. The room that the brains got, because it's not being pulled to that screen and having to deal with that image, it means that we can much more easily go into that whole capacity to be able to go into creative ideation. Because we give it room to abstract.

Helga Svendsen 12:43

It's so interesting, you say that I do quite a bit of work as a facilitator. And one of the things I've started doing in virtual workshops is I pair people up and get them to go for in inverted commas or walk together. Yes, so they ring each other. And they go for a walk and have a conversation, partly to get them away from the screen. Because we know it's exhausting. But partly because I intrinsically felt and I'm happy to hear it might may well be the case that your brain works in a very different way then and it frees it up to think a bit more creatively.

Fiona Kerr 13:09

Well, you've added another element which is walking. So as soon as you exercise and you get you're getting oxygen while you're doing that, then there's a bunch of it's a chemical called BDNF, and it starts to build new networks. So that's the chemical way you can build brand new brains and neurogenesis is just speaking. And in fact, direct interaction with humans is a major way that you get that, but certainly exercise is another if they happen to be walking in a, you know, a nice natural environment, then there's another conversation to be had about what happens. Yes. So it's a very positive thing to be doing. And you'll even if you're a parent, and you've got a teenager, it's actually a really good way to talk about an issue.

Helga Svendsen 13:49

I find I don't have a teenager. But as I understand it, driving if you have to, but walking, you don't have to have that intense looking at each other. Which, if you're a teenager and trying to grapple with what it's like, Yeah, can be hard to do.

Fiona Kerr 14:03

But you've got all these other things happening. You've got proximity, we've got voice. So you've got you know, we've got five ways that we exchange information when we are directly together. One of them is to look into each other's eyes, which is really important. But if we don't do that, and that could be cultural as well that we don't do that. There's a bunch of other things that just take over.

Helga Svendsen 14:20

Oh, gosh, I barely know where to go next. Ai I'd love to touch on AI, which I know is a slightly different, you know, alleyway that we're going down. But I'm so interested in AI in the boardroom and AI in boardroom decision making and those sorts of things and how it might impact boardrooms of the future. What are your thoughts around that?

Fiona Kerr 14:39

Okay, so, so we're using AI when we do use the screens. So one of the things to think about then is so one of my boards is in New York, and yes, of course I have to use the screen. There are times when I do just use the phone. And there of course have been times when I've gone across and gotten to know them. So when we're thinking about AI, if we're thinking about virtual members of a board, then part of that is around, what is it that we have to talk about have the board members had a chance to meet people face to face. So when we are then slotting in and using screens, it still if at all possible. And as early as possible, you do that. And then it's making sure that the technology is basically the best that you can get in terms of including them. So remember, we used to have things like the call where the little thing in the middle of the table someone somewhere else. Yeah. So again, fraught, because everyone ignores them and forgets them. And they probably go off and do their shopping lists. So something that I did many years ago was to, we got a blow up doll, and actually put it on that thing in the middle so that everyone remembered Frank. And so when you're using the tech, interestingly, the visual is important, but because we know how important the quality of the voices, the speaker is actually really important. Because if you have such a rich information, base as the voice, if you haven't got a really good speaker, you're trimming off so much of that information. So if you had to pick, you know, I'd almost be saying you get really good sound. Yes. And it's one of the reasons that we love the podcast, yes. Because when you've got it in your ears, and you're walking along, you still feel as if you've got that person and you're imagining what it's like. And so again, your brain is, is enjoying that, and sort of multifactorial work that it has to do. So think about that. And also think about how much you're going to use virtual versus face to face, and whether or not you move around in different areas so that you can get people together. So something that is coming up. Now, I'm probably just about to talk to one of the boards because one of their their chair is, is at her wit's end, because she just can't get the board back together again, because they will want to do it from home. But and the problem that they're getting as a board is it's changing their decision making processes, and it's actually changing the quality of some of their decisions and discussions. Because there are certain dynamics that will strengthen up with the personalities and the way that they use technology and the comfort. And also, there's a number of things that aren't positive. So we've got this fantastic capacity to be able to, you know, connect to anyone and I was working in five countries. So yes, I absolutely use the screen. But also, you have to

be aware of what turns off, and I also I have to do keynotes now over a screen. Yes. So very hard, hugely laborious, because I know that as soon as I'm not looking at that camera, then certain parts of the brain of whoever's looking at me will turn off. Yeah. So it's being in the slide the whole time, so that you're looking at the cameras using your peripheral vision, which is really difficult for us and highly fatiguing. If you share your screen, then the brain also after a certain angle, that which you look away from a face and at something else, again, certain parts of it turn off, I'd say what not to do is to certainly don't turn off your camera, that's a never turn off the camera. Because when you turn the camera off, there's a bunch of things that just turn off in the brain. So as far as the people looking at you are concerned, you've gone. As far as your brain is concerned, you've gone

Helga Svendsen 18:35

Interesting. So it's actually both sides.

Fiona Kerr 18:37

Yes, because not the same areas, but different areas. Again, I'm making that sort of decision. And when I've talked to them 90% of the time, what ends up happening with them is their distraction level rockets after a little while, because they're not seen it because the brain does different things when it thinks it can be seen on a screen. And when it doesn't, it's lovely to watch. And I'm an Associate in Finland is doing that work. And it's really interesting. And even if you turn off your microphone, yeah, there and there is a change in the level of receptivity that you have with information. It's just always changes. So there, there are massive steps back. So it's about one of the reasons we're calling the consulting area of focus is it's very much about focusing, you've got to try and get across the huge, I guess losses and maximize the positives. Yeah. But not by being over in, you know, enthusiastic because different parts of the brain will then turn off and on. Because it's a case of our for goodness sakes, calm down and that gets you know, that gets too much. So you've got to be engaged. You've got to be positive or honest because another thing that's interesting around going across AI to have discussions is because trust is a lot more fun fragile in that kind of situation, the capacity to have that high trust when you want to disagree. It takes a lot more energy and focus and good radar to navigate a disagreement. Yep. So it's intense. It's more intense, and it's very much more fatiguing. Oh, it's

Helga Svendsen 20:22

interesting, isn't it. So then, as I said at the start, it's been a COVID world for about a year for many of us. So I think what I'm hearing is that there's some boards, those that have been kind of groups for a while, they're probably trading on the trust and connection that they've already built up. But when new members join them, and they haven't actually met them in real life, or the further you get away from that in person connection, more challenging it will get they can be and certainly the work around onboarding that we do.

Fiona Kerr 20:52

It's just fascinating. The, you know, the consistencies around what doesn't work and what's what the difficulties are, when you're trying to get people in, in a situation where they haven't had that direct interconnection, which does make neurophysiological changes. So it does change the patterns that that occur.

Helga Svendsen 21:11

So for that chair of the board that you were talking about before that's battling to get her board back together. I mean, presumably, your advice to her was do what you can to get them back, but in what way? What, what can because this is going to be a common it is it is what's your advice?

Fiona Kerr 21:25

It has been for years, I mean, one of the reasons I went back to uni was to actually to do the PhD was to get the science because I would be in the boardroom or on the executive committee, so often talking about what a lot of them that weren't good with people, and often weren't complex thinkers just brushed off as you know, as a soft staff, you know, or else well, I'm a senior manager, I must be good with people. And just discounting the criticality of interconnectivity in organizations in order for people to be able to think problem solve, tackle issues together, you know, they just thought structures and rules do that, you absolutely have to have rules, but specific types. And one of the things you don't ever do with a ruler or a structure is get in the way of direct interconnectivity to do with, you know, people's capacity to be able to work together and do things and collaborate and create. And that's whether it's defense or circuit. So really interesting area, and I just got to the stage of thinking of, for goodness sakes, right, I'm going to go ahead and get the science. And you know, so now I'm an engineer, and, you know, because I'll stand there and a scientist, and I can tell them what's happening. And it works. Because these people aren't fools, these people just have a certain way of looking at the world. And you give them data in that way. And it's relevant, they have rights individuals. So now there's a range. And for the people that need the science, you know, for the people that are really good, complex thinkers, and are very good charismatic leaders, they know this, you know, they radar is just there, they are just going to do it, like falling off a log. But the people that aren't very good, the way that you increase their capacity is by giving them information that they consider is actually is relevant. And then they start going, Oh, okay, then well, if that's the base, then we'll give it a go. And, and it shifts the dial, and they say, all right, well, we'll do this as well, then, and, and you can just get them involved. And the lovely thing about that is apart from the probably, I don't know, because we haven't done it, but you know, that tiny percentage thing of a bell curve, around people's capability with a sort of complex thinking capacity. There are people at one end that are just born complex thinkers, and there are people, very few that are never going to be no matter what they are the linear thinker with the tiny little view of the world. But everyone else, the more you expose people to complex problem solving, yeah, with some agency, and that is critical. They have to have agency to actually fail. Because it's only when we act something out that a



lot of that learning is encoded into the brain. So and what we get, of course, is in organizations at senior level, they tend to be the only ones that can try out things. So they're learning and getting better. And unless you allow that capacity appropriately at all these levels, you know, appropriate problem solving and agency, you don't get that adaptive organization. So yeah, it becomes really interesting because you watch as even the people that don't really have truck with this at the beginning, they started and that's whether it's a board member or a surgeon because I work with in the whole thing around to health technologisation for human centric healthcare, you know, oh, so really, we have to be nice to patients, because they're told not to, you know, the older ones. Yeah. Now, but not all the time. Yeah. And you really see that I'm coming back going, Oh, it actually works quite well. We were all beautifully flexible. We just need to experience something understand why. Yes. And then we get on with it. And so this is often the why. So?

Helga Svendsen 25:15

Oh, Fiona I knew this would happen. You know, I feel like we haven't even scratched the surface that even in amongst that there's so many beautiful pearls of wisdom for people to take away. So what are the key things you want people to take away from the conversation that we've had today?

Fiona Kerr 25:30

Then the boardroom for themselves looking inwards? I guess, it is about thinking about the connection, in order to be able to maximize your ability to make nuanced complex decisions together as a group. So you know, what do you need to enrich that? How does technology sit in that? How do you best use it? And then when don't you use it, that becomes really important. And then for boards, thinking about organizations? I think it's understanding that because they are in a steerage situation, often more than a control situation, then that capacity to create the trust and alignment and the clarity around sense of purpose. Because that was the two things that came out of the 15 years of information that went into the thesis on creating and leading adaptive companies. That's exactly what it was, was a very clear, shared purpose. And very strong values alignment, right. And that's not nearly as easy to do, as you think. Yes. But when you've got those, if you think about it, then what the board creates, and the executive group as well, is, everybody knows where they're going. Everybody knows that. They're not always going to know how to get there. But someone's got their back. Yeah. So they step into that unknown. And if you think about how important that is now, you know, we'd look at next normal, not just new normal. And so how do you get people to step into that space of possibility? And it's by them trusting that those values will be maintained, even when it's difficult. And that we do have a shared direction, we have a shared place that we're all aiming at, then what you get is a very high level of innovation in there, because they know where the edges are, you know, they can steer against them. Yeah. And then that's when you get the creativity, not when you just say do whatever you like. But when you say this is what we're trying to do. And this is how we will go about it as in looking after each other, then it becomes a much better journey.

Helga Svendsen 27:36

Great advice there for people to think about. Is there a resource you would like to share with the take on board community?

Fiona Kerr 27:42

Well, I'm actually finishing an advanced leadership book, which is based on the thesis and I'm amazed how many CEOs have said to me, I've read your thesis, and you think, Oh my god, so normally, it's your mother and your, you know, your supervisor. And that's hopefully going to be finished in three months. The draft finished in three months, so it's going to come out this year. Okay. Yeah. And that's that looks at how to structure organizations and also how, how you what you do and how you think.

Helga Svendsen 28:14

Oh thank you so much for this conversation today. I know that it is going to be super useful for people to have a listen to thank you so much for sharing your wisdom with the take on board community today.

Fiona Kerr 28:25

You're welcome. It was lovely.