

Take on Board - Dr Sue Keay

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SPEAKERS

Sue Keay, Helga Svendsen



Helga Svendsen 00:00

Today on the Take on Board podcast, I'll be speaking with Sue Keay and about how to get on a board and being an effective board member. First, let me tell you about Sue and why I'm so excited to be speaking with her today. Sue set up the world's first robotic vision Research Center, and she now leads CSIRO's data 61 cyber physical systems program. She'll tell us what all of that means in a moment. Last year, she developed Australia's first robotics roadmap, highlighting how advances in robotics and AI will impact on every sector of the Australian economy. With a PhD in geo science and an MBA Sue combines science with business. She has interest in entrepreneurship and disruptive technologies and she started QUT's social robotics program. Sue serves on the board of the CRC for optimizing resource extraction, Women in Robotics International and the expert advisory panel of Queensland AI. She's been recognized as one of Robo hubs 2018 25 Women in Robotics You Need to Know About and as one of Queensland's Most Influential People in the Courier Mail Power 100 and as a superstar of STEM science and technology, Australia, and she's responsible for bringing the Grace Hopper celebration to Australia. Welcome to the Take on Board podcast, Sue!



Sue Keay 01:20

Yeah, thanks Helga.

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Helga Svendsen 01:22

So Sue before we talk about getting on a board and being an effective board member, let's explore a little bit more about you. Can you tell me what was young Sue like, and when did you get your first inkling you might end up as a board director,

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Sue Keay 01:37

I was a very shy child but I was very lucky in that I came from a family of early adopters of technology. And we always had access to technology. So in that respect, I had a very privileged background, I really didn't have any clear career aspirations as I was growing up. And we would never have thought of being a boardroom. Or even understood what that meant when I was young. And and it really wasn't until I had a bit of an epiphany in my 30s in the workforce, when I realized that I was not satisfied with being someone who was on the sidelines, and that I'd prefer to be someone who was making the decisions. And at that point, I had been involved with few companies where we reported to a board. And I suppose that demystified a bit what the role of the board was, and probably opened my eyes to possibilities.

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Helga Svendsen 02:36

Often people's first experience of the Board is that reporting to a board and, you know, it does just bring it to life. Sometimes it seems like quite a mysterious thing aboard but they're not that mysterious at all once you get to know them - quite friendly once you get to know them sometimes! Is there's something from the last month or so that you're proud of?

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Sue Keay 02:54

Or I'm very proud that I've been responsible for being bringing a version of the Grace Hopper celebration to Australia. So maybe not many people outside of the tech industry would know what that is. But the Grace Hopper celebration is the world's largest gathering of women technologists. And it's run by a group, a nonprofit social enterprise called the Anita Borg Foundation. And they hold it in the States. And they have more than 25,000 women technologists all in one place. And I felt that we really needed something similar here in Australia to raise the profile of the women technologists that we have. And also to demonstrate the career pathways that are available to them. And to encourage workplaces to be more diverse. And that we just found that up, it was called Hopper. Down Under, we had more than 750 women technologists attend the event. From all reports, it was very successful. And everyone's very keen to see us run something similar again,

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Helga Svendsen 03:53

How fantastic. I spoke to somebody just this morning, who said they'd been along to Hopper Down Under and was glowing praise about it. So I can totally understand how you're proud of that. It just sounds like an amazing thing. And to bring all of those women together in it must have an incredible energy in the room.

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Sue Keay 04:10

It was there was a buzz right from the beginning. And for many women who work in technology. In some cases, it was the first time I have ever attended a conference where they're in the majority.

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Helga Svendsen 04:21

Yeah. When you picture technology, you don't often think about the women in technology. So to have them all together, how fantastic. Yeah, well done.

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Sue Keay 04:31

Thank you.

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Helga Svendsen 04:33

So you're involved in a number of organizations, you're on the board of the cooperative research for optimizing resource extraction, you're on Women in Robotics International, and the advisory board for Queensland AI, can you just tell us a little about those organizations, because not everybody will know what they're about.

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Sue Keay 04:52

The first one, the Cooperative Research Center is funded by collaboration between the Australian government and industry who each invest funds to, you know, further research in a particular area. And in this case, it's around optimizing resource extraction. And by that, it's about trying to make sure that the Australian mining industry is sustainable. We have a cross section of members within that Cooperative Research Center from the research providers who are doing the cutting edge work on sensing technologies and and other ways that we can most effectively and efficiently extract resources right through to the SMEs and people who are part of our mining equipment technology services sector, who supply into our big mining companies. So it covers that whole range of participants.

And our role on the Board is just to make sure that we meet all the obligations of our funding from the Commonwealth. And also just to ensure that we actually meet all of our obligations to our participants, and that we, at the end of the day, able to say that we have actually made a difference, and can demonstrate that we are having an impact in making sure that the Australian mining industry is more sustainable.

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Helga Svendsen 06:07

Yeah. So that real balance of conformance and compliance, but also that performance and making sure you're doing really well at what you need to do.

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Sue Keay 06:15

Yes.

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Helga Svendsen 06:16

What about the other two?

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Sue Keay 06:16


And so Women in Robotics I'm only fairly newly on that board, although I've been involved with them for some time. And really, it is a movement that is about encouraging and supporting the women who are in the field of robotics. You mentioned earlier that my current role is is research director of cyber physical systems. So physical systems incorporates robotics and autonomous systems along with sensing system cybernetics, computer vision. And unfortunately, the percentage of women who are in these fields is probably sitting at less than 10%. And we really want to have the technologies that are going to be having an impact on our community to be developed by a diverse mix of people representative of the societies where these technologies will be deployed. So women in robotics is I'm serving on that board to help to make that happen by supporting the women that we do have in robotics, and helping to encourage women to consider careers in robotics.


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Helga Svendsen 06:19


You know, I think often people think about things like AI and robotics says inverted commas objective, whereas it's the people who designed them that make the rules around them. And if they are designed by a certain part of our community, then that's what they will represent and serve. So it's really important in all areas to have that level of diversity.


So

 Sue Keay 07:40
yes, exactly right.

 Helga Svendsen 07:41
Well done you on bringing them together., Queensland AI. Tell us about that.

 Sue Keay 07:46
Oh, well, Queensland is a phenomenon. So it started only I think, two years ago now as a meetup group, and there was just an explosion of interest in artificial intelligence at the time. But there was also a disconnect, where a lot of people were very keen to find out about artificial intelligence, but not so keen to have to go back to university and study a three year degree to find out more about it. And so it really is a community led endeavor to increase awareness of artificial intelligence, and also to give people the tools that they require to be able to deploy artificial intelligence. And so they run meetup groups, and they also support people to do massive online open courses with support so that they can actually learn about different aspects of artificial intelligence and applied in their own jobs. And it really fills a gap that exists at the moment, you know, I guess, a thirst for knowledge around artificial intelligence versus the time pressure that everyone feels, which often restricts people from taking out those opportunities, and Queensland AI very quickly has gone to more than 3000 members. I think people have no idea what a thriving artificial intelligence community we have here in Brisbane. And yeah, I'm really proud to be part of it.

 Helga Svendsen 09:04
Well, with all of that background in mind, we wanted to talk about getting on a board being an effective board member, I also want to pick your brain as they say, around what are some of the things that directors should be thinking about with AI and robotics and so on? So let's start with getting on a board. How did you get on your first board?

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Well, I got on my first board, the cast services PTY limited board by virtue of working for a cooperative research center that spun out a company. And so I had knowledge of the

business. And I guess they needed people who had that knowledge to be able to effectively run that board. That wasn't a very long lived appointment. And I was working with a university research commercialization company, uni quest, and they supported me to attend these trainings The Australian Institute of Company Directors course. And I'm a graduate of that. And at the time, the rationale was that they were hoping to spin out a number of companies based on the research that was happening within the university. And they really needed people with some expertise to be able to help sit on those boards and spin them out. But in the interim, I ended up changing jobs. And so I was a little bit, I guess, I was thinking that those qualifications may not ever get put too much use. And someone asked me whether I would advise a board on intellectual property, because that had been part of my background. And also, it was a mining related company. And my background is as a geologist, so I had the domain knowledge. And I guess that was probably a less scary way of being involved with a board than going straight onto a board. And so I ran the intellectual property and commercialization subcommittee, and I would report to the board, but I wasn't part of the full board meetings. And it was useful because I got to know members of that board, and I guess, get an insight into how they worked. But funnily enough, I'm probably not the best person to be giving advice on getting on a board. Because I was then asked whether there might be someone who would be suitable to serve on that board, and I racked my brain, I came up with a couple of names, until eventually the person asking me said, you know, we were actually thinking of you. And I feel, I don't know whether that is something that is peculiar to women, that we think of everybody else before we think of ourselves. But of course, when it was said it was like, Oh, well, that's obvious, of course, I'd be actually really good at that. But why did it not occur to me to put my name forward. And so then I've been serving on the CRC for optimizing resource extraction board, it is an elected board. So it is competitive to be on the board. But I've really enjoyed the experience. And it's a great opportunity for me to use a lot of the skills that I developed when I was in geology, and see how those can be applied.

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Helga Svendsen 12:15

I mean, there's some fantastic lessons in there, committees can be a great way of finding out more about the organization, both for you and for them. So a little try before you buy.

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Sue Keay 12:24

Yeah,

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Helga Svendsen 12:25

and it sounds like for this one, they liked what they saw and came back to you. The other lesson I'm hearing there is put your hand up - don't wait for somebody else to put it up. But even if you might not have done it in that instance, maybe I'm hoping people listening to this will be going, Okay, I need to put my hand up,

S Sue Keay 12:39
yes,

H Helga Svendsen 12:40
which is a great lesson as well. And that's skills alignment stuff as well, like they must increasingly be on boards, this need for technology, expertise, robotics, Ai, all of these sorts of things that organizations just have to know for the future.

S Sue Keay 12:56
You know, I think the other real lesson in this is the still extremely powerful influence of personal networks. Because me about that, if I was just sort of sitting at home and having all of my AI and robotics expertise, and no one outside of my backyard knew that I had those skills, then there's no chance I would be on a board. And it's such a personal selection process, I feel. And in some ways that makes me feel uncomfortable. Because I think that that disadvantages women, because people tend to look for the networks of people that they already know. And that might be quite exclusive of women. In my case, because I had become a known quantity, then that would in my favorite eventually. But for someone who's considering being on a board, who perhaps doesn't have many connections into any existing boards, I would say it's almost impossible. It's I know that some board positions are advertised, but even then people are going to be asking around about you, they'll be wanting to know have like personal, I guess validation of who you are. And it really is so much about trust. And I think that cuts both ways. I think on the one hand, you know, you want to be comfortable with the other people you have on the board. But on the other side of that you also need to have a diverse set of opinions. So maybe some people on the board should actually make you feel a bit uncomfortable. And maybe not just be people that you know, and you think a great people.

H Helga Svendsen 14:26
Absolutely. All the research around diversity. I think in essence, its diversity makes for stronger decision making. But it's harder.

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Sue Keay 14:36

Yes.

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Helga Svendsen 14:36

And you know, we know we've been to those meetings where there's groupthink around the table, and you're kind of going "Oh! That was awesome. How good are we! We all feel good about our decision!", when there's diversity in the room, you get tested more. I mean, it's what makes it strong. But it's much harder. And in fact, I read some research around it recently. And I'll link it in the show notes around often with diverse decision making, there is less confidence in those decision, which makes sense. But once you think about it, but it does make that role as a director, a little more of a roller coaster because there is less confidence even though there are better decisions.

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Sue Keay 15:09

Well, and I think there's a lot of boards are facing that challenge that they have heard that they should have more diverse composition. But finding it challenging to meet that. And I guess my message there is really, it's not that hard. There are actually plenty of women out there. And I think you know, the hapa down under conference, we just had shows, you know, there are at least 750 women technologists to choose from if you wanted to have them on your board. So it really is if we just rely on the same old way of going about things, then change will never happen.

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Helga Svendsen 15:43

Absolutely. And I think we need to advertise more roles, use the networks as well, but advertise them as well, so that they're out there for people to say 700 at Hopper Down Under, 3000 did you say in Queensland AI engaged? I mean, there are enormous numbers of people out there that have some of these skills? Is there a list of those that went to Hopper Down Under somewhere that people can tap into? Or do they need to come to you? Yeah, if people need it come to you Thinking about being an effective board member. And in fact, you know, your depth of experience in technology and AI and robotics. Before we get onto the generalities of being an effective board member? What are some of the things that people like me need to think about on our boards? What are some of the governance challenges that we need to think about? Where can we learn more about technology and robotics and AI?

S Sue Keay 16:37
You I think the ICT is starting to have quite a lot of good courses, for example, around cyber security to open people's eyes up about some of these things. But probably in a lot of companies that knowledge already exists, it's actually just a matter of having presentations to the board around some of these issues and being really appreciating in-house talent. And where you can identify that that talent doesn't exist, then perhaps bringing an outside expert to brief the board on some of the issues that they might need to consider around different areas. A very popular term at the moments reverse mentoring, you know, where you bring some of younger, more junior parts of the organization to share their experiences. And I think that can be quite powerful too.

H Helga Svendsen 17:20
Absolutely.

S Sue Keay 17:21
Because particularly with some of these new technologies, a lot of the knowledge probably does reside with some of our more junior staff

H Helga Svendsen 17:29
But actually thinking about it at Hopper Down Under what was the average age?

S Sue Keay 17:33
we actually aimed for and got great range of ages. So we deliberately wanted the conference to go from everyone from undergraduate through to CEO level.

H Helga Svendsen 17:45
Fantastic.

S Sue Keay 17:46
Yeah, there was a good spectrum of age and experience

H Helga Svendsen 17:51

fantastic. Of technology issues - I know that's probably a broad overarching term - but in thinking about technology, and some what are some of the issues that directors need to watch out for, what should be on our agenda at the moment to keep an eye on?

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Sue Keay 18:06

Robotics and automation are set to have a huge impact on every industry, the biggest challenge for Australia is that I think our economy has been very insulated today. And so we haven't really seen a drive to adopt technology in the same way that many of our rival countries are facing. And I think that that's a real risk for us. So there are two elements to that. One is that I'm not seeing urgency, in terms of adoption of technology, and then two I'm seeing a lot of hesitation about how you would then implement those things. And that's fair enough, I think that we actually do have a bit of a gap in Australia and what I'd call the integration space. So you've got the technologies, you've got the companies who'd like to use them, and then a gap in between how the technologies can be applied to that particular organization. But I think that with sufficient planning, then all those issues can be overcome. Once a company has made up their mind, why it is that they need to implement technology, then I think it's just a matter of putting forward an action plan of how to go about doing it. The thing to look out for is whether you're applying technology without actually having a reason for doing that. Just because you've heard that people are doing things does that actually make it right for you. There are some companies in Australia who are at the cutting edge, who we can learn from and the more of those stories that we get out the better. Just give you one example from here in Brisbane. What we do know, unfortunately, from studies is that many companies go into the idea of having automation, on the basis that it will reduce costs, because it will reduce headcount. Which is one reason why there is quite a backlash against things like robotics and automation, because you know, what is the upside for workers. However, the experience of many companies who have deployed robotics and automation is actually that they haven't seen a reduction in headcount, what I have seen is an improvement in productivity and profitability, which has meant that they've actually ended up putting on more staff. I think there's a lot that we can learn from some of the lead companies who are going through this process right now. And rather than spending a lot of time worrying about it, if we just go out and question and interrogate those companies and find out what they're doing well, and how they've gone about doing things, then probably people will find that there's already a roadmap on how they can do these things within their own companies.

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Helga Svendsen 20:50

Who would you say those that are doing it well, at the moment that we can look to,

S Sue Keay 20:53
there's quite a few in the manufacturing sector. Australia really is very advanced in niche manufacturing areas. But also, I would say that there are pockets within our energy sector, a mining sector, who very well advanced and in logistics, robotics and automation are starting to have a huge impact.

H Helga Svendsen 21:11
Turning to being an effective board member, I know that one of the things that you think is important is around that board and management team alignment. Can you talk us through your thinking there?

S Sue Keay 21:23
I think that you can waste a lot of time at board meetings if the alignment is not there. You know, I think there are two things that happen when you don't have alignment. One is that the management team, I guess, bristles at any board directives. But to that, then the board can waste a lot of time trying to get to the bottom of where the resistance is and why and what's going on. And the quicker that that can be sorted out and alignment found, then you know, they can be far more efficient for everybody concerned. How you achieve that alignment is not always clear, though. But I guess my experience has been that where there is not alignment, you can always tell because those are the areas which take up all the discussion time at board meetings, and then often end up being on the agenda, multiple board meetings until perhaps that issue is not resolved. But the alignment issue is resolved.

H Helga Svendsen 22:23
Is there a story you can tell us about either one of your boards or something where where that alignment has been strong and how that happened?

S Sue Keay 22:30
Well, I think it is often distilling things back to their basic elements. So every now and then it really pays for everyone to go back to the drawing board and look at why a company was founded. And often that can be sufficient to really get things back in alignment. Because once people do that, then it really should be pretty clear whether decisions are consistent with the purpose of the organization. When there are alignment issues, I think that's when everyone really needs to go right back to basics and back to the drawing

board and go well, you know, this is these are the bare bones, why we exist and why we're doing what we're doing. What is it that's inconsistent that is causing this feeling that people aren't aligned? Yes. And how can we then move people back into that? Or do we actually need to adjust our purpose?

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Helga Svendsen 23:27

One of the other things you had mentioned is around the pre meeting and the importance of the pre meeting. Can you talk us through that?

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Sue Keay 23:34

I think that it's one of those things that can save an enormous amount of time in a board meeting. And that is just to actually start to find out, you know, if there is a contentious issue, get a sense of where people's thinking is at. And I think that you know, that can often help to get alignment before the meeting is actually started. Having pre meetings also is an indication that board member is have a relationship outside of the board room. And I think it is dangerous for people to just come in, spend a set amount of time together, leave and never communicate outside of those meetings, that allows too much room for people to, you know, lose that sense of alignment.

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Helga Svendsen 24:19

Yeah, developing relationships with your co directors. Yeah, seems to be a common theme. What are some of the ways that you've used to develop those strong relationships with your co directors?

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Sue Keay 24:30

I think I mentioned when I was a young, I was quite shy, I've had to just get used to being someone who is on the phone a lot. I guess that's the main way. Because you know, often, you know, directors are busy people, it's not easy to ever be in the same room together. So those times when we are in the same room together for board meetings is pretty precious. If something needs to get sorted out outside of that. Yeah. A lot of time on the phone. Yeah, having those conversations.

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Helga Svendsen 24:56

When do you have those conversations? Is it when you're on your way to work? How do you fit it all in?



25:00

Yeah early morning, late in the evening.



Helga Svendsen 25:03

Yeah, right,



Sue Keay 25:04

which is not a great advertisement for work life balance. But someone said to me recently, there is no such thing as work life balance, it's about having work life harmony.



Helga Svendsen 25:12

Yes, I have heard that on I'm not sure if it makes it any easier when you're just filling it in at all levels of it only works when you actually do actually take a long lunch or an afternoon off.



Sue Keay 25:23

Well, no, actually, that's where I'm looking forward to autonomous cars. Yes, I will get so much email and so many phone calls done if we have autonomous cars.



Helga Svendsen 25:33

Absolutely. It's almost going back to old technology, using phones to actually have telephone conversations with people. But it's so important to do that to build those relationships.



Sue Keay 25:43

Yeah.



Helga Svendsen 25:44

So then thinking about the conversation that we've had today, what are the main points you want people to take away from the conversation,

S Sue Keay 25:51
I think the biggest thing to consider is how aligned you are. And as I mentioned, they're probably warning signs, if there is an alignment, but particularly between the board and the management team, or it might just be within the board. And I think anytime you get the sense that there's not alignment is a time to have a chat with the chair about bringing everything back to basics. And stripping it all down and looking at why the organization exists, and why they're trying to achieve what they're trying to achieve. And whether the current business of the the organization is set up to do that.

H Helga Svendsen 26:29
And is there a resource you would like to share with the community, it can be a TED talk or a book or podcast.

S Sue Keay 26:36
I've always been quite strongly influenced by Simon Sinek's 'Start with Why', which you could probably tell from the theme of what I think is important. I've seen it work in practice, it's just that he put it into words. And although it's a very simple concept, it's very powerful. Because it's so true. I think that we particularly if you're task focused, you can get very much caught up in the what. And when people describe what their companies do, it can be all about the what. And as Simon points out, nobody cares what you do. Yeah, they care why you do it. Yes. And it's simple, but it's effective. And if you can apply it, which are not always easy, but if you can apply it, I think it cuts through a lot of the tensions that you often find, either within boards or between boards and management teams, and distills things down to the very essence so that it actually makes problems a lot easier to solve.

H Helga Svendsen 27:32
Absolutely. And I'll make sure I put a link to the book and the video because I love the little video on it as well. In fact, Simon Sinek is coming to Australia early next year, I think,

S Sue Keay 27:41
Oh, wow.

H Helga Svendsen 27:42

Yeah, I'll put a link to that in the show notes as well. Finally, if this was a board meeting, we would have an action sheets that comes out of it. What are the couple of things that you might put on the action sheet from our conversation today?

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Sue Keay 27:54

Or probably but it do a phone-around of the other directors, that should be one. I suppose one thing I didn't mention was also the importance of having a relationship with the management team. So that the board does not appear to be some mysterious entity that never interacts with anyone but the CEO. And it's all really about relationships. So in terms of actions, it's really about different ways that you can build relationships.

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Helga Svendsen 28:21

It's such a key thing for directors. I've heard all sorts of stories from some of the women directors who go off and get their nails done together through to making the phone calls from their cars on the way in the morning to whatever it may be. So it certainly is a common theme. Fantastic. Thank you so much for your time today. I know that you've been mad busy the last couple of days, doing Hopper Down Under which again, congratulations on the amazing success of that. So I really appreciate you taking the time to come and talk to me today because I know that people will love to listen to some of those tips around getting on a board, being an effective board member and thinking about those challenges that as board directors, we need to get our head around even if we're not the technology person, we still need to get some learning around. So thank you so much for sharing today and being here with me.

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Sue Keay 29:05

Thanks Helga.