Speaker 1

Hello and welcome to the Human and Machine podcast. My name is Yaku. I'm here with my new host. Co host Lenny is on leave this week. I'm here with Tibello Mercedi. Tibello is part of our team here. It's lovely to have you on the podcast.

00:18

Speaker 2

Thank you, Yaku. Excited to be here.

00:20

Speaker 1

Refer to you as Tebelo. Feels very formal. So Tabello is part of our team here at element eight, and Lenny has taken some leave. If you missed last week's episode, it was with Christopher Clark from Abmbev. It was episode 23. It was about the brewery of the Future initiative. Really great conversation with Chris, who's the tech supplier lead for the Africa zone at ABMbev. Just about some of the goals and objectives of their brewery. The Future initiative, which obviously is all about productivity and driving sustainability, but also very importantly, a focus on the human element and some of the things that they've put in place to ensure that their people are ready to adapt new technology and improve the process.

01:07

Speaker 1

So that was a really good chat with Chris last week and on the topic of people, we have spoken over the last couple of episodes. We've spoken about some of the challenges that we have in our industry or specifically in manufacturing. And one of the sort of reoccurring themes that come out of a lot of conversations is about skills and skills shortages and availability of people. And while there is a recognition, or at least an agreement, that we need to be preparing the next generation of people, specifically around stem and the stem field, it goes a little bit beyond that, in our opinion at least. And we feel that diversity and inclusion is a topic that also needs to be addressed at a little bit of a higher priority than what it has been.

01:59

Speaker 1

So on the topic of stem, by the way, if you remember our conversation that we had in episode 14 with Suneli Goba, who is the founder of Oso Sciencey, and just her passion for just igniting interest and love for anything SteM within youngsters, that was a lovely episode as well. So for this one, specifically for this episode, we're really excited to be speaking with Devendri. Ankia Devendri is an engineer, first and foremost. No, not first and foremost. He's a wife and a mom, first and foremost, but also an engineer who's currently with a global multinational engineering business based down in the Western Cape. And, yeah, Tebi, just somebody that we have an enormous amount of respect for. We've known Davendri for many years. Yes, a couple of years.

02:52

Speaker 1

A lot of respect for Davendri, she's a woman whose opinion is always valued and seeked, sought out. So, yeah, we're looking forward to chatting with Devendri today. It's always good to catch up and chat with good people. And welcome to the Human and Machine podcast, Devendri.

03:12

Speaker 3

Hi, Yaku. Hi, tebe. Thanks for inviting me. I'm actually excited to be here and chat with you guys.

03:17

Speaker 1 Fantastic. You're in Cape Town.

03:20

Speaker 3 Yes, lovely. I am actually in the Western Cape. It's always been my dream to live by the coast.

It's a fantastic place. It feels like there's a lot of innovation, a lot of good stuff happening down in the Western Cape, at least from our perspective.

03:40

Speaker 3

I would agree. There's definitely a lot happening in the Western Cape. I think, especially on the innovation side, maybe Western Cape. We're late at the party, but now that we're there, we're kind of more.

03:53

Speaker 1

Eager and more excited, and that's absolutely fine. It's not whether you're late, it's whether you how you finish. So, Devendry, we've got a couple of things we would love to get your opinion about today and just chat about, but maybe to start it off with just your background. You're certainly not a youngster in the industry. I didn't just say that. You're old. You're certainly not old, but you're not a junior in our industry. You're a very established engineer. You've been in the industry for a couple of years now. Maybe let's kick it off with where it started for you in terms of sort of a youngster. You wanted to become a doctor or a lawyer or a fireman. I don't know. Where did your journey as far as being an engineer start?

04:46

Speaker 3

I think my initial aspiration was a hairdresser and a mechanic. I know it's two different things. My dad was a mechanic and my brother was an auto electrician. So, I mean, on a typical afternoon or weekend, it was normal to help my dad fix cars. There were a few times when were out and about maybe having a bit fun and lying to our parents about where were really going, and then the car wouldn't start. And being a mechanic's daughter, I didn't need to call home for help in our high heels. And, yeah, outside a club, my cousin pops the hood and we sorted the car out ourselves. So I think I was very lucky. I grew up in an environment where you could still be daddy's little princess.

05:30

Speaker 3

But you were also taught, and it wasn't like an actual activity to learn how to change a tire or figure out what's going on in your car. It was just one of the things you did.

05:41

Speaker 1

I haven't changed a tie in years. I don't know if I'll be able to tell you.

05:47

Speaker 2 Very recently.

05:51

Speaker 1

That's fantastic. So, I mean, as a young girl, I suppose, and like many of us as youngsters, we have these wild, romantic aspirations of what we want to become. And very often it ends up being something totally different to what we end up doing. But that combination of headrest and mechanic is a new one to me. And then you obviously finished school and then university was Johannesburg or family home.

06:21

Speaker 3

Was Johannesburg, actually, it was KZN. So I finished school, I took a gap year and decided that I was going to study computer science at school. It was the one subject I never got below 98%. It's a badge I wear very proudly. I can't say the same for the rest of the subjects. Everybody was like all your teachers were, you're so good at computer science and logic and programming and maths that you should absolutely go into do a BSE in computer science. So that was my first choice. And when I was filling the application forms in, they told me, no, you have to put a second choice. And electrical engineering was the second choice. But it was the first thing I got accepted for. And there was a computer science option, so I took it.

And I think it's just my background is that whatever you do, first choice or not, you give it your 100%. And to be quite honest, I've always enjoyed my field. Now that we're talking about it, the first time I programmed an IC, I was actually in primary school. My brother was doing technical electronics and he brought home these ics and we got those marshmallow egg houses. So for show and tell, I don't know if anyone remembers doing show and tell at school.

07:39

Speaker 1 Yes.

07:39

Speaker 3

So we used a breadboard with an IC and we connected some leds to this marshmallow house and pretend created our own alarm system. So I think indirectly, I've always been kind of working in this field and it was only in university there was this conscious decision that I'm working towards the engineering field. And then when I started my career, it was actually at one of the breweries. Fantastic. Where I got to do a little bit of everything. And I am so grateful that's where my career started. I think it gave me a proper foundation of how the different elements in a typical manufacturing plant fits together.

08:18

Speaker 1

Yeah, for sure. And I think your point about being grateful that your career started there. We've had so many people echo that, and I think a lot of people that we've spoken to who were able to start their careers at breweries, specifically back in that time, south african breweries, they all speak very highly of that initial experience as well as the culture and how that was an incredible stepping stone for their careers. And a lot of those people are still there. They've never left. That was your introduction to the world of manufacturing. It was a beer house.

08:55

Speaker 3 Yes, and it's not because were making beer.

09:02

Speaker 1

Just on your experience, were there any specific influences in terms of your choice of occupation or field of study, any encouragement or discouragement or any strong views around that from anybody?

09:23

Speaker 3

I think this field kind of chose me partly because of my brother and father who introduced me to the field. So I think subconsciously I was always gravitated to this field, and they kind of treated the boys and girls in the family equally. So that sort of laid the foundation that just because you're a girl, it didn't mean that this field was not an option for you. So I was always encouraged to do whatever I want. And I think having people kind of imply that girls won't be as good was probably all the justification I needed to prove people wrong. I think when I was younger, I think I liked challenges, so I gravitated to things that were supposedly difficult. Engineering is not that difficult. I think if you're just someone who likes a logical environment, then it's the place you should be.

10:19

Speaker 3

So in that sense, it's not difficult. There's definitely moments when you're trying to solve problems that you sit there and feel like pulling your hair out. But the reason we do it, and I'm sure most engineers are like this, that moment when you figure something out, that's the moment that makes it all worthwhile. That's why you want to be in this field.

10:39

Speaker 1

Yeah, for sure. I know Lenny always speaks of engineers is more about the want and the desire to figure

something out and to learn continuously. Learn. It's more about that than just being simply a technical person. It's that want and that need and that desire to learn and figure things out. Yeah.

11:02

Speaker 2 And trust. You get at the end of it all.

11:06

Speaker 1 For sure.

11:08

Speaker 3

They are right. The darkest hour is, how does it go? The darkest hour is before the dawn. And it's usually that point when you're like, I've tried everything, and you try that one last thing and then it works. So I think one of the roles I had was solutions architect, and it's probably a solutions architect and also in sales. The reason I absolutely love what I do is you're constantly looking for solutions. You're looking at doing whatever's being done, but just do it a little better. And I think, typical engineers, we may not necessarily attempt to fix what's not broken, but it's about continuously being better, finding better ways to do things, solving problems, and I think that's the draw to this field.

11:54

Speaker 1

Yeah, definitely. You've mentioned solution specialists. I think you pointed it out. I can't remember what your comment was earlier. You said something about the variety of different areas that Devendri's been involved in. Yes.

12:07

Speaker 2

So what I wanted to know from you, Devendri, is looking at your history or your LinkedIn profile, and through talking to each other over the years, I was looking at the variety of kind of jobs that you've had which basically touch on most of the main or the most skills that people would go through in the automation space or in the manufacturing space. Right. So I just wanted to know from you, how did you progress through them? First of all, was it a conscious decision to just move to the next one or in the space? Basically, how did you go through it without even mentioning exactly which role you got?

12:53

Speaker 3

So if you picture that diagram, I think it's the ISO 95 triangle where you start literally on the shop floor. I feel my career has progressed in the same way. I literally started on the shop floor, running cables, doing trunking, drilling to put the trunking on the wall. So that's literally where I started. And this is why I say I'm so grateful, because I believe starting there gave me that solid foundation and before getting married and having kids. And I think you're almost like a sponge. You want to do everything, learn everything, you've got lots of time and energy. It was a good place to be. But seriously, as you get older, you don't really want to be doing field service or running cables.

13:40

Speaker 3

But the importance of doing it is, even if you do it for a little while, it gives you an understanding of how that part of the world works. And as time went by, I've always gravitated to software. I think having a strong programming background, it's just a place I feel comfortable in. So as I evolved in my career, it was a combination of going eventually to the thing that I think I'm best at, and that's in the software space, but also as a mum, working, doing technical support, and field service doesn't actually work when you've got kids and you need to be home at a certain time, not just because you want to have dinner with your family, but when your kids are a little younger, they just want cuddles all the time.

14:22

Speaker 3

So as I've evolved, I'm now in sales, so I still get to spec solutions. I still get to be quite involved in my field, but it's a little less physical.

Speaker 2 Okay.

14:38

Speaker 1

You mentioned the mom part, which is obviously not something that falls by the wayside. It's a significant part of your life as being a mom. And maybe looking at the last year with COVID for example, it feels like it's as draining energies just talking about it and the impact that it's had on so many people. And then everybody working from home, and you are typically at home with the entire family is at home, kids at a home. People are trying to continue working, trying to continue doing what they would do ordinarily, but everybody's in the house, kids running around. That was quite challenging for a lot of people. And it feels like in certain industries and certain companies, it obviously depends on the business and the culture within those companies.

15:33

Speaker 1

It was recognized as we're all human, some of us are parents, and it was okay where others were a little bit less accepting of the. I can't jump on a call right now because I have my kids running in the background screaming. It was quite a tough time during COVID last year, typically in your household, how did you navigate around all of the distraction that you typically wouldn't have in the office?

16:04

Speaker 3

So I think Covid was a little extra for us because we also moved houses four times during COVID because were in the Western Cape and our house in Johannesburg was not sold. So we had to come back, sell it, come to a rental property, then move into our house. And I can tell you, Covid, kids and working and never leaving the house. I think it's resilient training, that's all. I'm going to put it down. Know, it's like it tests you. Even if you're a glass half full person, you do get tested. And there are moments when you think, whatever, teachers get paid, we should double it, because for those few hours they have your kids. But for us, I think the moving was probably the hard part.

16:52

Speaker 3

My role, I've already been working from home, so I've already had a fair amount of experience in prioritizing my time and sort of putting together my own schedule. I think it's something most moms have to do anyway. But it helped to have a job that already prepared me for it. I was lucky in that my kids were already in a school that used iPads, so they were already using Google classroom. And I actually do remember having this conversation in the office. And I think at this time, Tabello was probably around and I was trying to decide, do I use a school that's forward thinking with technology? It's probably one of the best decisions I made.

17:32

Speaker 3

I knew that being in this field, I also wanted my kids to sort of, even if they don't choose to be engineers, I don't think my daughter's going to be an engineer. I think she's probably going to be a singer or something of the sort.

17:48

Speaker 1 Not a hairdresser or a mechanic.

17:50

Speaker 3

Yeah. So were lucky. We also got to participate in a cooking show, which she won, and she did not get those skills from me. Yeah. So during COVID I think you learn a lot of things. You learn to prioritize what's really important. You kind of question everything. Your career, your family, where you live, where you spend your time. And I think Covid allowed us to do that. It allowed us to pause, look at life, what's valuable, even consider your career. Is this where I want to be? For me, I think it reinforced, especially when you're working on solutions and you're still able to use technology, it reinforced this idea of encouraging people to go the technology route. I mean, there's absolutely nothing wrong with hairdressers. I love my hairdresser. There's nothing wrong with singers, accountants.

Speaker 3

I mean, if you're in an asian family, hairdressing, by the way, is not an option. You can become a doctor, lawyer, engineer, but there's absolutely nothing wrong with any other field. But being in the technology space, I think you almost feel, to an extent, a little more in control of your life, especially during COVID you felt comfortable using the medium that you needed to connect with the outside world.

19:14

Speaker 1

Yeah, for sure. And did you also find just being at home, generally speaking, it feels like we typically work a lot more and a lot harder. It's almost like as if your typical business or office hours sort of faded away slowly, and all of a sudden, you'd find yourself still working at 1011 o'clock at night. That is true, yeah. And it was a little bit more tiring than what it typically would be in an office environment. And we do hear that from a lot of people that we've spoken to, is that fatigue that we all felt being not only stuck at home, but just working a lot harder while being stuck at home.

20:01

Speaker 3

There was an extent of that, but I felt that working. I kind of got to reschedule my day. So it's almost like you start the day off with a bang and you would do a whole lot of things and then you kind of could take a break in the middle of the day and focus a bit on your kids and have that family time. So if I did put my laptop on at 730 when the kids went to bed, it was guilt free because I had that uninterrupted time with my family. So I don't know if anyone's been doing this before, COVID but I'm sure a lot more people are doing it now. I think just learning to reevaluate and also reschedule your day, like, it doesn't need to be eight to four, five. It's okay to take a break in between.

20:48

Speaker 3

And especially in the role I am, it's not time based, it's outcome based. So it worked for me. I don't think it would have worked for everybody, but it definitely worked for me because I could do stuff at the time that worked best for me. Yeah, but Covid has definitely been challenging. But overall, I felt that maybe having a young family, we've moved around a lot, we've lived in different countries, so I think we already had this adapt and carry on kind of attitude, which helped.

21:24

Speaker 1

Yeah, for sure. I wanted to ask you about, before I do, I want to ask you about your experience in Dubai. I know you spent a little bit of time or not a little bit of time. I think it was at least a year in.

21:37

Speaker 3 There for six years.

21:39

Speaker 1

Was it six years? Oh, wow. I didn't realize it was that long. I remember you mentioning Dubai. I didn't realize it was that long. But I love what you said about the quality time aspect. And I think very often when people speak about think about balance, they perceive work life balance as a nine to five and a five to nine, and they sort of try to limit it between those boundaries almost. I don't think that's realistic. I don't believe that's realistic. We all know it's not. And then you sort of take the next step and you think, all right, maybe perhaps balance is not necessarily the ability to control the time that I start or finish, but at least in making time available where I've missed out. And even that sometimes, despite our best efforts, doesn't happen either.

22:29

Speaker 1

And the quality time aspect I think that you mentioned is so important because whether it's half an hour or even just ten minutes, to be present during that time that you have is far more valuable than having more time. But you're not really present, and it's not really quality time.

Speaker 3

Yes, I agree. Just to reiterate that instead of being in the office and only leaving at 05:00 I was now taking lunch with my kids. And to be quite honest, it almost re energizes you because you've been busy. Then you take time where it's just you and your family and you're focused on them. So when you come back to your work, it's almost like you've had a chance to destress. You can refocus and you can do it guilt free. Especially as a mom. I think the one thing we carry around a lot with us is guilt. Are we doing enough for our families? Are we doing enough for our children? And allowing us the opportunity to work out our timing, it's easier to create a work life balance.

23:37

Speaker 1

Do you feel that guilt that you mentioned? How do I phrase this? Is that a conversation that you would have with your friends as a mom, you would naturally feel that you almost feel guilty for not being the very archaic and traditional mother figure all the time. Is that the kind of guilt that you're referring to or specifically having a career?

24:07

Speaker 3

So there is a little bit you almost feel like in between. I did take a few years off to be a full time mum, and somebody once used the line, kids these days, I don't know where they pick it up from, but if you're always in their face, you know exactly where they pick it up from.

24:26

Speaker 1 That's a good point.

24:28

Speaker 3

So, yes, there was that part. But as they've grown older, they don't need me as much. So the guilt is not as much, but there's always in the back of your mind, like, let's be honest, we do more takeaways, we buy more stuff where it's almost like meal kits or whatever. I mean, the ideal you would think of is freshly grown veggies from the backyard. I think this is probably all modern day working parents. It's like you want to give your kids the absolute best, but in reality, you probably need some sort of compromise. And what I learned is, yes, there's always going to be a certain degree of guilt that, am I spending enough time with them? Am I checking up on them? Am I enabling them to be the best versions of themselves?

25:18

Speaker 3

But along the way, I realized that having my own career makes me a good model for them. It shows them to be disciplined, to prioritize your work. And also, like a lot of people realized during COVID don't underestimate what stay at home moms go through. No matter how much we love our families, being with them 24/7 requires special skills. Going to work is almost like a little side holiday.

25:51

Speaker 1 It requires patience and its own resilience.

25:54

Speaker 3

Yeah. And I think being a mum, I've learned is probably where I learned to deal with difficult people because I have two amazing children. But sometimes they can be headstrong, and there's moments when you almost don't know what to do. But you still have to be civil, you still have to treat them nicely, you still have to grow the relationship. And I think that teaches you how to deal with difficult customers.

26:20 Speaker 1 Absolutely.

Speaker 2

From my side, I just wanted to understand Devendri. So with what's been happening with COVID Right. And the technologies that we've been forced to now adopt as our day tools.

26:35

Speaker 3 Right.

26:36

Speaker 2

And with the history you have in the industry, do you feel like, do we have space for women specifically to be more involved in those roles that are traditionally forcing you to work a nine to five? So is it more, especially women who have children? Right. The stereotype is that women who have children can't work in those kind of jobs. Do you think that with all these technologies, can we expect to or will it open up the space for more women to come in? I mean, I've been fortunate enough to work with women, and like you, as one of the special ladies in my life, or women in my life, I just want to know.

27:20

Speaker 2

Yeah, basically, can we expect to see, or do you think we can expect to see more women coming in those traditional men roles or traditional demanding, time wise roles?

27:33

Speaker 3

Absolutely. Because the technology enables us to be connected. I think once upon a time, if your child was sick, you would have to stay at home, take sick leave or whatever leave. But the technology means I can still be connected. I can still use Zoom or teams or whatever to connect with my colleagues. And I think Covid allowed a lot of people to embrace technology. I think the tools were always there. You had some people call them early adopters that were, especially people in the technology space were using the technology to make it work for their lives. And I think Covid forcing us to use technology to connect allowed us to see that actually a lot of people can work from home. Even in typical admin jobs, you can still have your sick kid next to you, because sometimes when your child's ill.

28:31

Speaker 3

They don't need anything except you to physically be next to them. And I think definitely there's definitely room. This is definitely going to make it a lot easier to be female, to have a family, and still be fairly dedicated to your job.

28:49

Speaker 2

Okay, that's good to hear. Because I'm a single guy and I live alone. I mean, I never think of those kind of things. I'm used to all of it.

28:59

Speaker 1

It's a good point because being a parent adds that extra complexity. But then some of the traditional challenge as a woman, I'm guessing, is that you are the traditional caretaker figure. And some of the guilt that you referred to earlier, Devendri, is that one aspect, and the other aspect is that I would imagine that in certain people's minds, that's still how it should be and how it is still perceived. So you have the additional challenge of not only your own feelings towards you, having a career and enjoying your career, but also still people believing that you should be the primary caretaker of the children, which is absolutely today, in 2021, not the case anymore.

29:45

Speaker 3

Yeah, that is still true. I think becoming a working mom, I learned to use a support system to take care of certain tasks, like house cleaning and stuff like that, and maybe assisting with meal preparation. My kids are getting a bit older, so they don't need so much of hands on. But having a sort of job where I can focus on the outcome of

what I need to deliver and work around my time so that I can prioritize has definitely helped. So I think if anybody wants to come into this field, when you're young and single guy, single girl, and no family, it's very easy to sit from the early hours of the morning to the late hours at night because you're so engrossed in what you're doing that it's not difficult.

30:33

Speaker 3

I'm sure everybody here has stories of maybe they happily settle one, two in the morning, working on something because it had all your attention. You can survive without eating, except in Covid. Then you're always at the fridge. But yeah, I'm sure most of you can relate to this, and then your family comes along and then you have to reprioritize. So that does become difficult. But eventually, I think, I don't mind anyone saying that I'm older or been in the field for a while. I believe getting older, gaining experience, is actually a good thing, and it kind of teaches you so many things. So I remember fairly early in my career, someone told me there's two things you need to survive in this world, either the education to do your job or the experience. So I've got the education part.

31:27

Speaker 3

I'm quite glad to be getting the experience part, because as time goes by, I've just learned to focus on what's important, and that alone has made my life so much easier.

31:38

Speaker 1

Yeah, absolutely. It's understanding what is actually. At the risk of sounding like a stoic, it's the understanding of what is important and what you can control and focusing on how you react to the stuff that you can control. Unfortunately, I think most of us only learn that really late in our lives. If we realized that a little bit earlier, we would have saved ourselves a lot of stress. I wanted to chat to you about something that Tebi mentioned about stereotyping. I don't want it to be a tough conversation, but again, you are a woman. You've been in our industry. We have a lot of respect for you and your opinion on the topic of stereotyping. If we talk about diversity, and more specifically, I think diversity is understood, we need more women. We need more people from different parts of our communities.

32:41

Speaker 1

We need more. Not even millennials. What's a Gen Z that's coming through now? In a manufacturing and industrial automation world that is potentially not the most romantic or attractive industries? We need to get more of those people in the industry, and we need to attract more. So I think the diversity part is understood, but for me, it's more about the inclusion part, and I think that's a cultural challenge or a cultural aspect. The inclusion, it's having a culture of that not even being a consideration, but an absolute must, or having a culture of not really wanting to embrace that. And that will probably differ from person to person and organization to organization.

33:33

Speaker 3

This is absolutely true. Working in South Africa, traveling to Italy, Germany, spending a considerable amount of time in Dubai, it does change a bit from country to country, company to company as well. There's definitely maybe a small percentage of people that may look at females and almost think, are you here for what it's like? Did you enter the field because you're trying to ride on the diversity wave? Are you getting the position because you're female and we're filling a quota in the south african landscape? Maybe there might be some truth to that. I hope not, because it's actually an insult to the females that chose this field outside South Africa. I know that played very little role in it, in me getting the positions I did.

34:25

Speaker 3

But just something I come across a few days ago where the percentage of engineers, when I started studying was something like 16%, and now we're probably about 25%. So I think a lot of work has been done. We're definitely going in the right direction. So a lot of companies are focusing on diversity, so there are females in the space and people have embraced us. One particular client of mine said that when he met me as the new salesperson in the region, he was so glad it was a female and I was like, okay. Which was absolutely surprising,

he says, because the females that chose this field, they know one thing, that you chose it because you want to be here. It's not like somebody in your family pushed you in this direction.

35:14

Speaker 3

You chose engineering because you actually enjoy the field, you have a passion for it. You probably like logical environments, you like the technology aspects, so that alone makes you want to better. The second part, which is not the very pretty part, there is an aspect where you almost have to work twice as hard. I don't know what it's like in other fields, but to prove that you belong here. So I don't know how it feels for new engineers, but certainly when I started, there were many times where I feel like I was put in positions to almost test me, like, will you survive? And whenever I realized it was a test sort of environment, it actually encouraged me. I think I'm just that sort of person. I like challenges generally. Look at the glass hustle.

36:05

Speaker 3

So yes, if you are female and you come into the field, it is not the prettiest of environment. I mean, if you are going onto most sites, your clothing or your dress is dictated by the safety requirements. So there's that aspect, the PPE, whatever you're using. Also the practical side, like no matter how awesome your boots are, you cannot use it into most plants, you have to wear safety shoots. So there's that part, but that doesn't mean you have to stop being a female. I think the first part of my career, I almost dressed like a tomboy to be taken seriously. Thankfully, things have changed. Or maybe I have changed and I don't really care anymore because I think I've earned my place here. So if I felt like wearing bright pink, I do and I don't care too.

36:56

Speaker 3

And the reason why I think I'm thinking of bright pink. I was probably maybe four years into my career and I was doing an audit at an automotive company. And you have a sort of time between twelve and two in which the lines stop and you can go in and do your work. And it was freezing cold. So even though I was wearing the branded jacket of the company I worked for. There was one point that I was just so cold. I went to the car and I got this pink jersey. It just so happened it was a pink jersey. And I'm not on such a big pink fan. And I put it on, I get into the line and because the Ethernet cables are sort of like running in between everything, you're like literally in the middle of these CNC machines.

37:39

Speaker 3

And I could hear somebody screaming in the background because he was like, what are you guys doing here? And whatnot. I didn't realize he was speaking to me. He thought someone brought their girlfriend to, and I was happily going about, I had headphones out on, I was listening to my music, happily doing my audit and getting on with life. And so, yes, you do. Every now and then people wonder. But I would say times have changed. That was probably true for my early career. I think the inclusiveity side has definitely changed. People have realized that females have something to bring to the environment, a different way of thinking, a different approach. And I think our industry has progressed to the point where you can be female and be here and still rock if you put in the effort.

38:30

Speaker 3

I think in any field you can still do well, but don't have blinkers on your clothing. In most fields in manufacturing, you can't wear the latest fashion when you're going to work, you're probably wearing shoes.

38:46

Speaker 1 Tevi and I would know nothing about that.

38:50

Speaker 3

You know what? There's something simple, like, now that we're on Zoom and everybody is like, they'll probably, instead of waking up early and getting dressed and driving to work, they can wake up at ten to eight and still be on work on time. And actually, it's not true for most girls. We still need to do our hair and makeup.

Davendri, I think you were right about when you said it's probably you that changed. I think you're right. It was you. But I don't think it was change. At least I don't believe that people change. I believe that they grow. And to get that growth, you need to go through a process of breaking something down and rebuilding it stronger or better than what it was previously. So you're right. It's probably your own views that have changed because of the way that you have grown. Because if it was change, it would be simple, it would be overnight. That's why it was growth more than change. And I'm so happy that you can be vulnerable about that and be open about that, because I think it's so important for young woman engineers. We have in our office, we have a young woman engineer.

40:10

Speaker 1

And to your point, we've noticed many more young female engineers. And it's so important for them to hear that and to understand that you have your own internal struggles around what you should be based on common old popular belief and perception. You not only have that, then you also have potentially in certain environments, still the requirement to prove yourself. And that's tough. That is really tough.

40:42

Speaker 3

But I think it helps you grow. Eventually it's something you'll just get over. Like maybe the first time you interact with someone, they will think you're the secretary taking notes, and then they realize actually you're the engineer here to do the work.

40:58

Speaker 2 That's terrible.

41:02

Speaker 3

I think overall, in any field, whatever you choose, nothing comes easy and you have to start somewhere. I would always recommend to anybody in the field, or actually any field, the first year or two of your career, just remember that qualification gave you a ticket into the field. You don't know all the answers. That's when you're a sponge. That's when you can get down and in the trenches and sort of, while you're in the sponge phase, do as much as you can, take in as much as you can, immerse yourself into the field. My general rule for most things is two years. If it doesn't work out by two years, it's not happening. Whether it's moving to a new country, anything, two years is if you haven't made it by then, it's not happening.

41:52

Speaker 3

But, yeah, I think if I look at my career, that first year, I would say was the most important. But let's say two years where you really learn the most about your field, and that's where you have to build that foundation. And this is true of any field.

42:09

Speaker 1

Yeah. And I think you're 100% spot on about the experiences. And maybe the thing about diversity is that when we think about it in the sense of race and gender. And I think to go beyond that, it's more about diversity in terms of the experiences that we've been through. And that's the reason why we need to have a diverse workforce with, regardless of race or gender or age, but diverse just in the sense of what we bring as part of the experiences that we've had, because we've all had different experiences and different journeys to where we are now together as a team, for example. And that is a great benefit that you get from diversity, is you get all of those life and career experiences and that molds a lot of your culture as a business and as a team.

43:07

Speaker 2

And it's always something that shows, especially in my short time of being in the industry. You can definitely see when it's a device group of people, you can definitely feel that there's that spirit of openness. I can definitely say that, yeah.

And you will only have that culture or that understanding if you are a diverse group and you appreciate where everybody's been and what they've been through and the value that they bring as part of that experience. Yeah, definitely.

43:39

Speaker 3

I do agree. It's very important working in a diverse environment because all your clients are not like you. So working in a diverse of team also helps you better understand and relate to your customers when you go out and see them.

43:56

Speaker 1

Yeah, my daughter, were chatting last night and were talking. She's studying to be. Studying education. She wants to be a foundation phase teacher. It and the topic of the Fortune 500 list came up and I think the Fortune 500 list of the top 500 companies, I think that was first published 65 years ago, if I remember the article correctly. And over the past 65 years, the number of female ceos in 65 years increased from, I think it was two, one or two or three less than five to now 37. So it has taken 60. It has taken 65 years, but it's still not quite half there. And anyway, were having this discussion, and it was on the back of our conversation that we're having now.

45:00

Speaker 1

And I was telling her that we're doing a podcast today and we're hosting you and I want to chat about some diversity and things. And she said, well, dad, how do you know that those women want to be the ceos of companies?

45:14

Speaker 3

Actually, you just wanted touch on that because there's a blog I saw, something about the non adventures or something of someone. Sorry, I can't remember.

45:26

Speaker 1

We won't reference that. Don't Google that.

45:29

Speaker 3

Okay. So the thing was, you know what? It's also okay to choose not to be a CEO or a coo and to choose a less ordinary life. There's absolutely nothing wrong with being a stay at home mom or an engineer in the sales field or the CEO. And I think what's really nice about the time we're living in now is I think the generation before me was fighting to get in just so we could have a seat at the table. But I'm hoping. Well, I feel we're at the point where the seat is there. And now I have the choice if I want to take it or not.

46:05

Speaker 3

And that's probably the best place to because if you sort of pursue that role, it's because you absolutely want it, not just because you want to change it for your daughters or the people coming up after you.

46:20

Speaker 1 Exactly.

46:21

Speaker 3

So I'm glad to hear that we've made progress. And I also think that, you know what? If you don't want to be the CEO, it's still okay.

46:30

Speaker 1

Yeah, 100%. And it's important for young women to understand that there is no pressure to your point that you should now be an engineer or you should be. You may still be absolutely whatever it is that you want to be. It should just be easier to achieve what that may be than what it has been historically. And there shouldn't be any reason why it should be more difficult for you to do that.

47:01

Speaker 3

I think working with great people like yourself and Tibello has definitely helped change the landscape, changed the thinking. Having been embraced and given the tools I need, is really what I needed to be good at my job. And I think that it's not just that females have entered the field, that guys have actually come to the party and embraced our presence and realized that it isn't you're a female or a male engineer, but rather to look at you as an engineer. Having been to a few different countries, the first thing you would notice is there's a language sort of barrier, maybe a cultural barrier. But 99% of the time, once you start speaking technology, the barriers disappear. And that's what I found, being female in this field, that really, you kind of need to know your stuff.

47:56

Speaker 3

Unfortunately for females, there is no health measures. You can't just be average. You really have to be that person of excellence. Everybody should do it. But there's a little more pressure on you as a female that you absolutely need to know your stuff. And that point when you start talking technology and you actually know what you're talking about is when everything else falls away, nobody actually looks at your outward appearance, but looks at what you can bring to the table in terms of your experience and knowledge of the technology or whatever it is you're working on.

48:31

Speaker 1

Absolutely. The other stuff becomes relevant, as it should be. I remember you chatting. I hope you don't mind us speaking about this. I remember you speaking very passionately about the cyber junkyard initiative that you were. I think you were the project manager of. Yes, I was, of the entire cyber junkyard. And maybe the engineers that have been around for a couple of years will remember that incredible initiative that aimed to just, I suppose not even ignite, but really just excite students.

49:07

Speaker 3

I'm actually excited that I'm working on an initiative to restart it, not necessarily in the manner it was. Because I think during COVID when I was sort of reviewing or thinking about my life and the places where I felt that I made the most impact. Cyber junkyard, without doubt, was, from my career point of view, was without doubt, one of my highlights. And I think it was a quote by Mandela, but please don't quote me about the best way to change a person's journey or projection is education. And that is true, because there's one thing that no one can ever take away from you is your knowledge. And I think if you want to truly make an impact in the world, that is one way you can do it.

49:54

Speaker 3

There's a charity I work with, and they've got this big mural of the african continent, and they have the scripture, feed a man for a day. No, give a man a fish, and you feed him for a day. Teach a man to fish and you feed him for life. It's something that's always stuck with me because I've always felt. I remember in school when they told us the story of the apple falling on this guy's head, and then he discovered gravity. And I'm sitting there and thinking, oh, my God, would I ever figure something like that out? And then I realized we're all not supposed to do that. But law should leave a mark of some sort. And the one way I feel I would love my legacy to be is that I've made a concerted effort to change people's life in the better.

50:39

Speaker 3

And I believe education is the way to do it. So cyber junkyard was an initiative where students were treated as system integrators to give them a taste of what the world's really going to be like, to basically prepare them for the world that's going to come. One of the hardest lessons you learn when you leave university is everything you learned was really to train your thought pattern, to make you approach problems in a certain way. It's basically giving you a ticket into the industry, but you don't know all the answers. All it's done is prepared you to handle

what's going to come. So cyberjunct allowed us to take it a little further. Students got a taste of what it would be like to be a system integrator programmer.

51:24

Speaker 3

There's so many different aspects to our field, and this particular competition gave you exposure to a lot of different things. I got to meet some of the students now engineers that were in cyber junkyard. And I cannot tell you how nice it is that I don't really recognize everybody because I ran it for a few years, and every year it was in excess of 100 students. And people would reach out to you like diventri, do you remember me? And you trained me on this, or you showed me that. And I myself was in my early twenty s at the time, and I was basically finishing off my qualifications and I took on cyber junkyard because it was a sort of initiative where there was no payment for it. It's like, do it in your own time.

52:07

Speaker 3

We'll just give you the funding and support to do it. And so that probably laid the foundation where there's a few charities that I. What do you call this? Support, with that same idea of teach a man to fish and you feed him for life, where it's about teaching people life skills, teaching them basic technology, things they can use to sort of go on in life. So cyber junklet was definitely one of those things. And I think that there are initiatives. I see a lot of it on facebook, and I'm still excited because there's something that's coming on my side, and this is going to be something I'm going to be running. And I will definitely let everybody know once it's up and running.

52:55

Speaker 1

Fantastic. We're excited about that for you. And let us know if there's an opportunity for us to be involved or support what you're doing. I think our community of engineers and specifically manufacturing industrial automation is a very small community. And I think there is a lot to be that could be done to work better together as a community. Without a doubt, there's massive opportunities. As much opportunity as we have as a country and the manufacturing opportunity that we have, there is an opportunity for us to work a lot better together as a community. So that's exciting. Yeah. Do let us know once you're ready to share what that's all about. I quickly want to shift gears and just talk a little bit about the manufacturing world and the industrial world.

53:48

Speaker 1

It's been obviously on the back of COVID I would imagine the south african manufacturing world, I would imagine. We hear it every day. We've seen similar challenges to other countries. There was various plants and sites and facilities that couldn't operate at all. It feels like the last couple of months, there's a little bit more positive sentiment. The rand dollar is looking a bit more positive. It seems like there's some initiatives and some budgets have reignited and started off what is your perception of the manufacturing industrial world at the moment, even if it's just from a Western Cape point of view at moment.

54:31

Speaker 3

Some days it's very exciting, other days it's almost like a Briani mix. You've got customers who have used Covid to restrategize how they're going to do stuff. They've worked on their projects, all those things that they never quite got time for. People spend the time now focusing because were not running around so much. We almost had quiet time and space to actually work on whatever it is we wanted to work on. So on that side, we have a lot of customers that are starting projects that were sort of kind of going to happen. Now it's happening. Yes. One of the biggest struggles that I think especially I've come across is deliveries, because the factories that would have, especially in a hardware environment, the factories were not operating, which means there was only so much of stock.

55:24

Speaker 3

And as the stock got depleted, we're feeling the effects now. And it is definitely a struggle. So some days you're specking a solution, other days you're literally trying to work out supply chain. So there's that aspect. And then I think when people speak about each industrial revolution and what it brought, and I think when everybody talks about the fourth industrial revolution and we're talking about smart manufacturing and all these wonderful things, but the actual reality is most people didn't really embrace it until they were sort of pushed to embrace it. And that's what Covid did. I mean, those people that didn't particularly like online engagements or moving

things to the cloud or getting more of your stuff on your phone. The technology has been there for a while, but people are embracing it a lot more.

56:18

Speaker 3

So I feel like went through the phase where were just automating plants. Then were in the phase of putting down scada systems so that we can get visualization into the plants. Now we kind of were in the phase of making our asset cycle increase, our utilization better, our maintenance better. But now with COVID I think a lot of people were sort of excited and pushing new technology. But maybe our industry was, like I said, prioni mix. Some people were ready and some people were just not. They were all over the place. But now they seem to be a more consistent, across the board people are embracing technology. People who are closer to retirement especially. There's a lot of that in the Western Cape. Almost didn't want to rock the boat until retirement. And that's not really the ideal space to be in.

57:17

Speaker 3

And what I admire about a lot of the colleagues I've worked with is that they've always embraced, and I think working with you guys, the one thing I liked, whenever a new something came across, people embraced it, figured it out, and learned how to work with it. It actually isn't like that everywhere. But Covid has forced people to embrace technology, and then they realize it's actually not so difficult. And that opened the door to more smart manufacturing, remote monitoring, more cloud hosting sort of opportunities.

57:52

Speaker 1 Definitely.

57:52

Speaker 3

So it's a space I like to play in. So this has been great for me because I feel like there's more people interested in it.

58:02

Speaker 1

Definitely. It's definitely a positive outcome, if you want to put it that way, that we've seen from COVID in our industry is the reluctance that they were previously existed around new tech. New tech was almost just introducing new tech for the sake of it. Why? And I think being forced to adopt a lot of these things and actually understanding the value, that's definitely become a lot more pervasive, which is fantastic.

58:30

Speaker 2

I think also just the type of solutions that are coming out now that people are actually building on, it's actually phenomenal. Yeah.

58:39

Speaker 1

And you're 100% correct. The new solutions that everybody. Technology has made it possible for so many people. We see guys, I think about Kudzai, for example, Kudzai from industry four O tv. He's got these incredible tutorials that he does where it's literally a raspberry PI and whatever the little sort of edge device may be. And he goes all the way with site wise, and he does AI stuff, and it's become a lot easier for a lot of people to do that with the technology that we have available. Yeah.

59:16

Speaker 2

It's almost like the industry is being reborn with all the new solutions instead of all the old and trusted solutions. I mean, they still work, but then it's like we're building on top of that now.

59:27

Speaker 1

Yeah, for sure. It definitely is an exciting time to be in the industry, as far as tech goes.

Speaker 3

Yes. I feel like that level of excitement people only had when they just finished university and they're super excited and then work kind of slowly erodes it. But Covid kind of forced you to look at technology again and kind of reignited that passion to use new things, try new things, play with raspberry piles.

59:54

Speaker 1

Yeah. And that was pervasive, not just in our industry, but I think about my son's school. As a teacher, you're so used to. To your point about a school that embraces technology a little bit more. But you're a teacher that's in front of your class, and all of a sudden you have to do that over a webcam. And I remember the one class that he attended. Shame. We could see his one teacher. We could see the top of his head, but not the rest of his face. It's a very silly but practical example of how people had to pivot and they were forced to use that technology. And hopefully all the positive benefits that will remain of using tech, and it'll just make life easier and better for.

01:00:41

Speaker 2

Everyone to say, we're all learning to eat our vegetables again.

01:00:47

Speaker 1

We don't eat vegetables in this office. Sure. We've chatted for a while.

01:00:54

Speaker 3

Sorry, you were speaking about schooling. I think the most funny thing that I witnessed was pe over Zoom.

01:01:04

Speaker 1

How's that done? Is that everybody in their own room or backyard and doing something?

01:01:09

Speaker 3

Yes, there was a combination of that. And then my son would have to do different things and then sort of send the videos to the teachers, and they created this one particular video where they pretended to be sending a rugby ball from one teacher to the student or wherever. So I think you had in a certain direction so that when they made the video, it actually looked like everybody was together.

01:01:38

Speaker 1 That's cool.

01:01:39

Speaker 3 Yeah, it was funny, but it was fun because some people threw it in the wrong direction.

01:01:46

Speaker 1 Definitely.

01:01:47

Speaker 3

I think that it was a good move because I think there was a time when it almost was only a private schools that would embrace, like, they're an Apple certified school. So it was only schools like this that was using the technology. And now what's nice to see is even public schools are learning to use Google meets Google classroom. And that is great because they're preparing those kids for the world that they're actually going to be living in. They're going to be working in. So it was not the best introduction, the way we. I don't think Covid was something anybody would have hoped for, but there's a lot of positive that has come out, and embracing technology is definitely one of them.

01:02:31

Speaker 1

Definitely. And I mean, as much as we recognize the loss of life and all the. Not only that, but the economic loss and the livelihoods that were destroyed, we absolutely have to recognize some of the positive that came out of it as well. Otherwise, it's an opportunity, a missed opportunity to learn or understand the world a bit better. And you're right, there is a lot of technology use cases that came out of COVID that is absolutely positive. Maybe any advice that you have for young women either studying engineering or BSc or any technical field, or maybe people, young women that have just graduated, trying to find their identity and their home as far as a career goes, any advice that you have for them.

01:03:26

Speaker 3

So one of the things that made me enter this think, I don't know if anyone's ever watched the Little mermaid, and I think her name was Ariel and she was always needing watch a McCullough to fix a thingamum bobbin or whatever. If you're someone like that you like tinkering, you like fixing, you like working out solutions, you like to get your hands in and figure out how things work, this is absolutely the field for you. If it's something you're kind of dabbling in because you believe there's more opportunities for females or whatever else, or someone's pushing you into the field, then maybe rethink it. It is like any other field.

01:04:09

Speaker 3

Be here because you actually want to be here, because you enjoy what you're doing, you enjoy putting together solutions, you enjoy technology, you like playing with the new things that come out and making it work. So if that's you, then 100% this is the field. I think what's nice about it is it never gets old. I think I've been in the field for about 15 years and there's always something new happening. There's always something new to figure out. And if you're hoping to study something once and then ride on that for the rest of your life, this is not the field for you. I think if you're excited and maybe it keeps young, I don't know. But if you're excited to be in a field where you're always being challenged, then, yes, this is the field for you.

01:04:56

Speaker 3

Expect that when you first start off, it's not going to be pretty. You can very easily enter a role where you skip certain sort of, I don't know, layers. If you want to say, I would absolutely encourage you in that first year to do everything. Go and figure out how the hardware works. Go and figure out how the software works. Even if it looks difficult, give it a proper go, try to figure it out. This is that phase where you need to build that absolutely strong foundation. For me personally, there's two things that allowed me to reenter the world after deciding to take. I think I took a short break to be a mum, was having a degree, because it proved I actually kind of know what I'm doing in the field.

01:05:42

Speaker 3

The second thing is I had experience that nobody could take away from me. I knew how things work. Yes, the technology changed, so there was like a learning curve, but that learning curve is a lot more exponential because you've already built a base. So I think I would say in that first year, try and get involved and do everything that you can while you don't have kids waiting for you at home. Maximize it. Go dive head first and embrace your field. And there's one thing that you will have to do at some point. Wear safety shoes. But the first time you have to wear safety shoes, carry three pairs of socks because you have no idea how heavy they are. And if you're somebody who's lived in heels and flip flops, it sounds like the most ridiculous thing.

01:06:40

Speaker 3

But one of the first hard lessons is blisters from wearing safety shoes. And maybe don't wear bright pink jerseys when you're in a plant doing an.

01:06:50

Speaker 1 Audit, be confused for an intruder.

01:06:55

I don't think that's something you would actually get much of now. But, yes, if you're excited about technology, then go for it. I think times have changed the numbers, I think from most statistics show there's a lot more females. I think a lot of companies have put a lot of focus to open the doors for you. So if you choose to go this option, don't be average. Be one of the better ones in your field. Embrace it and always aim for excellence.

01:07:27

Speaker 1

Yeah, for sure. That's great advice to Vendri and also very good advice, not just for young female engineers, but just for young people in general. Great advice. Tepe. Sorry, it felt like I interrupted you earlier. No, were chatting yesterday about, we had the discussion about when do you reach the Yoda status where you are the provider of all answers and you know absolutely everything. And then Tebbi and I had this chat yesterday, and it doesn't exist, or at least as soon as you reach it, you're behind again the next day. So it's continuous learning.

01:08:05

Speaker 3

So the only upside of working on projects where you're aiming to educate people new into the industry, it helps you realize how much you've grown and how much you've learned. Because, like you say, there's some days where you're like, you know what? I know the stuff. And other days you're like, oh, my God, what is.

01:08:24

Speaker 2

I can relate to that. It's always good to be working with a team that always has your back, especially during those times where you have the dips. So I think, like you said, with the industry changing and generally the perception of who and who does not belong in quotes that enables you to actually have that support system to say, you know what? Even though I am not here today, I can actually help or actually do it. And tomorrow I'll be the yoda that I want to be. So I think that's actually encouraging, especially for when you have those tips. I know everyone has them, but it's always easy to think, no, I'm the only one who's going through this.

01:09:13

Speaker 1 And you're right, tebi, very much tebe.

01:09:16

Speaker 3

For highlighting that, because I think being a female in the field, when I had those moments, I almost didn't want to admit it. I'd rather go and dig deeper, look at help files, phone support, wherever. I almost didn't want to admit that I didn't know everything because I was afraid of being questioned about should you really be here. But I think you'll always have those moments and it's okay to reach out.

01:09:42

Speaker 1

To your colleagues and having the awareness to recognize when to be the student and when there's an opportunity to be the teacher. Yeah, that's a good point. Cool. Any other questions for Davendri?

01:09:58

Speaker 2

I think I've had a lot to learn from. I'm definitely happy to have had this chat with divendry.

01:10:05

Speaker 1

No, for sure. It was insightful. Divendry, thank you so much for inviting me. It was lovely catching up with you again. It's been too long since we've last seen each other. I think we probably haven't seen each other and I don't know how many years, but I'm sure one of our next visits down in Cape Town, it'll be great to check in with you and the family again. But yeah, thanks for your time. Thank you for your insights. Thank you for the advice and looking forward to see your next step in terms of being part of the community. I think the community in South Africa is fortunate to have you and engineers like you, and we will watch the space in terms of what's next on your list of what you want to do some skills development. So we're looking forward to that.

01:10:53

Thank you very much for inviting me, Yaku. It's definitely been nice talking to you guys again. I realize how much I miss working with you. Opportunity that we can do stuff together, especially on the community projects. I'm going touch on it a little bit. It was actually my cousin who passed away from COVID and he started a kitchen to provide meals for people in disadvantaged communities so that they can get to school, so that they can concentrate. And I will give you more information as it comes along. And I think that's where we're planning to start. That not just give people the key to the industry, but also the support. Thank you guys very much. I absolutely enjoyed speaking to you. Yep, that's it. Thank you.

01:11:42

Speaker 1 Thanks, Davinia. Appreciate it.

01:11:45

Speaker 2

Tebi, what do we have next week? We have Renee from Freyo.

01:11:49

Speaker 1

Yes, of course we're continuing with theme, I suppose you want to call it that. So we're chatting with, she is from SGS Mineral Services. We're going to have a chat with her about also a little bit about her experiences as a female engineer, but most specifically also around APC solutions and what she's observing in the industry around advanced process control, where she's one of the brightest people that I've met in that field. So that's on next week's episode. But as always, thank you for listening. Hope you found this discussion and conversation valuable and helpful. If you have any suggestions, please send us an email podcast at element eight co z a my name is Yaku and I'm development. Thank.