Raw transcript

Microsoft Teams

Interview OTOD Tech

2021-03-27 00:19 UTC

10:00 to 11:00 (AEST)

Recorded by Peter Aird and Reuben Korngold

Organised by Peter Aird

In attendance Interviewer: Peter Aird Interviewer: Jaejun Oh Introducer: Rubert Rubenecia Interviewee: Reuben Korngold

Questions

Peter:

Please tell us about your IT work. What exactly do you do?

Reuben Korngold:

I've been involved working in IT for, Let's say about 25 years give or take and actually my father was also in IT, so grew up around computers. which doesn't sound like anything specially these days, but certainly in those days there weren't. There weren't so many people that had that luxury and experience of being being exposed to these things cause they were pretty far in in in many. Households at that time.

So these days I've worked in various different roles, did some software development system administration and then also found myself involved in software testing, which has been very much a growing field I've also done various project and program and portfolio management for different. Different organisations and these days I work in IT consulting work for a company called Access HQ.

The HQ sounds like headquarters, but it actually stands for human quality, and the idea there is it's all about actually helping organisations improve quality and that recognition that even though as you guys are doing at the moment, learning a whole lot of different subjects. The subjects might be quite technical, but in the end delivering technology is all about the people that that use it. You know, focusing back on the wire, That's what it's about At the end of the day, you know you you're writing some great code, but they have great code is hopefully making someone's life better and not inconveniencing them with bugs or clunky user interfaces or unnecessary things that that make people's life harder. And We've all experienced those things, so yeah,

Peter:

Please tell us about the industry you work in.

Reuben Korngold:

I'm not quite sure how to answer that because, I'm I sort of work in a in a as a consulting director.

So what I do varies quite a lot, but in in general terms it's all about

helping companies to deliver quality when they've got large IT projects, You know we can in actually help with .

Discuss with them about how our organization could help them to improve the quality of what they're doing, and sometimes even you know if they've got another organization built or even their own internal team building software.

To have that independent view of things and make sure that they're getting what they signed up for in their projects.

So most of my time these days is spent more in a in a sales capacity more than anything else, which is all about then, you know, talking to these different companies and helping simplify very, complicated things. And then, as part of that. Also, we're not just. I'm selling the same thing each time. It's about developing a solution, customized for the individual. A client and their individual project and circumstances, and often budgets as well.

In IT consulting, maybe the expansion of that then would be that we work with lots of different companies in different industries, so that can be, you know, places like even movie theatres for ticketing websites, I think it was, working with manufacturing companies, they often have supply chain, software warehousing things like that. We worked with various different organisations on that side as well as the retail side. Obvious things are things like websites as well as again inventory management type systems we worked with Foxtel, so Media video streaming technology.

It's really quiet for all different you action government. and I guess that's all I've been with this company for nine years, which is a long time in in IT. And in fact it's the longest I've ever worked for one company and part of the reason that I've stayed around for that long is big 'cause, we're getting exposure to so many different things and obviously dealing with the supply chain management challenges. Bananas is quite different to Foxtel, It's a very different, world and even different personalities of people. You have to work with in the different industries.

Peter:

Yeah, and different expectations. I should imagine like 1 customer wants XYZ, another 1161 $\rm Z$ and you have to do your best.

Reuben Korngold:

in the real world there are a lot of different organisations with different levels of maturity. Some of them you know it's probably worse. Then you know, I yeah, a kindergarten in terms of their approach to delivering software effectively and other places there like you know you go in there and you go. Wow, you know we're gonna have to work

really hard here to do something special just to keep up with these guys. See you kind of have to adapt and you know the goal always is to help advance the maturity of what they're doing. But obviously you can't bring The old singing all dancing approach if they if they need to take baby steps, so that's the kind of things we kind of need to adapt to.

Peter:

What other kinds of work do you have to do?

Reuben Korngold:

Yes, so I've spoken about, you know selling out, selling our services, but also then we help our clients set the strategy and approach of what they need to do often Like I was saying before, many organisations there a little bit lost like. I guess with projects there's different sizes of projects and often it's not a great measurement, but the reality is it's measured sometimes by its budget. So there's projects that they might be spending, say, \$50,000 to build some software, so they you know it sounds like a lot of money, but in IT it's not really so by the time they pay everybody salaries and the more weeks it takes 2. To get it done the more it costs and you know it can be a little bit lost. How do they actually make sure they get a decent level of quality? Maybe without breaking the bank and then at the other extreme I had been involved for example with. I'm. Bank and there was a \$1 billion, so I'm probably I don't know if that's better actually was like there was \$1 billion project. And a \$1 billion sort of five year project You know, it's it's a mind-blowing amount of. Money, so obviously the approach to that is quite different as well. one you better make sure you get it right and two. The focus on quality and the way that you would approach something like that is is obviously quite different. You need to chunk it down and you need to. You know, probably bring that all singing all dancing, dancing approach that I spoke about before. So yeah it's all about these things. We sometimes run workshops so you know

we're talking about the human side of things and one of the things about. People is that people all have different interpretations of what just happened. And because of that, obviously if you're building a piece of software and I say I want you to build a pizza ordering website, and then what I meant, what you heard, what you did and you told somebody else to do it. By the time I actually get it, it's unlikely that it was what I'd intended anyway. So by running workshops we bring people back together again to build a shared understanding because. If you don't have a shared understanding, we can all right brilliant code and make the most amazing thing, but if it wasn't what the customer actually wanted it at the end of the day. It's not good.

There was a a superannuation company. We did some work with before they built an app to manage a super and to cut a Long story short they what they built. It was amazing. It was really cool but when they went back to their customers nobody actually even wanted to use it anyway. So it was a it was a waste of effort. And I mean, you know there's many things like that. You know you get apps and things and you go. Well, I'm not really going to use it, so it's about doing the right things and having those workshops helps people to to understand. And the other thing I would say is solving problems so. It's always there's. There's a lot of challenges both technical people related and the like, and sometimes we just have to come in and sort it out one way or another. And that's what it's about.

Peter:

Who are all the different people you interact with in your work? Please tell us about them.

Reuben Korngold:

So look a lot of the times we deal with project managers so you know, helping keep everything running and getting all different groups of people to do things. I don't know if you guys have done anything around like Gantt charts and project scheduling or any anything around that yet?

(Peter) Not yet.

() I'm sure you will. But you know, it's my yeah, their jobs

kind of to make a timeline of all the different tasks. So, Peter, you you're building this and then JJ you're building that, but maybe you can't build your part until Peters finished soon. Now I have to kind of make a timeline is called a Gantt chart that starts to look at all those different dependencies and then as a project manager I then need to make sure Peter,

you said you were going to finish it by Friday. Yeah, you know you're on what we call the critical path if you don't finish then JJ can't start so it's getting all those pieces together. And if you multiply that around a large project it gets very complicated very quickly. Luckily there's some software to help do the planning bid, but then again, it's all about people, and it's about you know, making sure that you know that you've got what you need, and that if there are any issues that you stay on. On top of them, so I deal a lot with those kind of people. Project managers can sometimes just be deadline based rather than quality based as well. And so you know you have to deal with lots of different personalities to get there.

Just briefly. Other roles might deal with procurement officers, so because we're selling consulting services, there's companies have a buying process. And so you know they have to create things like purchase orders and sign off on contracts to make sure that we can get started and also get paid for the work under the right terms. So I guess that's more on the commercial side. And other than this few other technical roles like solution architects, development managers, testing managers and various.

Other people from time to time.

Peter:

Please tell us about your interactions with other IT professionals.

Reuben Korngold:

You know, helping the project manager to be successful, but sometimes having tough conversations with them as well, because often they like this is what we're going to do well. OK, I know that. So what you're trying to do here is how we're going to help you get there, and sometimes that that kind of personalities are people that have to do that job. You have to sometimes negotiate with them and have the right conversations, particularly where we're focusing on quality, 'cause they just sometimes want to take it off and say it's done. It's Friday, I'm finished, but on the other hand, if the if the quality is not up to scratch, just chucking it over the fence is not a good idea either. So, so yeah, there's a bit of that from also our actual consultants in our company. Because we work in a in a technical sphere, there is sometimes this balance between you know the person doing a perfect job and getting it right within the constraints that are there. And also as I said, you know, aligning to what customers actually want as well, because just building something brilliant,

but isn't what somebody wanted. Doesn't just like if you build a house. If if somebody wants a modest 3 bedroom house and you build them a 20 bedroom Palace, they and then send them the bill. They might not be very happy about that and that sounds like they might not even use all the rooms anyway.

Peter:

It sounds like that super app you were talking about. They made the great big spending about that. No one wanted.

Reuben Korngold:

Yeah, yeah, exactly, and it happens all the time. And unfortunately and in in fact. I guess one other thing I didn't say before 2 is that why is quality so important in IT projects? Big cause, a lot of IT projects fail.

And why do they fail because of lack of understanding and lack of proper management of the man? Yeah, if you're interested, it certainly look up the Victorian order to general's report on IT projects, which basically says they do. The Victorian Government does such a bad job with IT projects. They shouldn't do big IT projects at all.

I mean literally, and I mean this. It's not just Victoria, by the way. I mean, there's plenty of stories. I think Queensland health. They built a new system and I think they waste about \$800 million on a on a system that that that didn't work. There was a Department of Education in Victoria. I'm sure you saw on the news, the census couple of years ago now, yeah? Handle the load that was. In fact I know some of the people that were involved and they shouldn't have should have known better and it was one of these things again of they built something, but it wasn't fit for fit for purpose. So we're all about you know, helping people get that quality outcomes.

Peter:

Yeah, I think I think that's important too. 'cause if you do take that sensors up into consideration like once you've got that bad taste in mouth of the government can't handle that, then all of a sudden there pitching something about health and wanting to record your health records. You like, No, I don't want you dealing with their health records. You census, you never got it right in the 1st place. So quality. Yeah, I take your point. Quality is important, it is.

Reuben Korngold:

Well and you know we spoke about cinemas and even you know, we've worked with one of the pizza deliveries companies. If their website goes down at 5:00 o'clock on a on a Friday, guess what happens? They don't make money and you know, I mean some of the numbers thrown around for some of those pizza companies. So couple of \$100,000 an hour. So, it's it you think poor quality for two hours at 5:00 o'clock. You know if you down between 5:00 and 7:00, that's a massive loss of money.

And then there's a as in point out, the reputational loss, which is once it, fixed that problem. You've what you are talking about there really is.

Trust it that your trust is lossed that hang on the government didn't do a good job with the census. Why would I let them touch my health records.

Jaejun:

What about your interactions with clients or investors?

Reuben Korngold:

so I guess my sleep with what we do in his interactions with clients. And I guess it's you know it's probably very similar. When I said interactions with IT professionals, many of them are actually our clients anyway and I guess the important difference between working in an internal company where you're all working for the one company is that managing client expectations. So as I mentioned, yeah obviously. The Pizza Company, for example, might have very different expectations to, you know, a government Department, and in fact what they expect an and their motivations are actually quite different. I mean, obviously the you know the pizza companies there to make money they want to sell. You sell your pizzas, governments, more service and sorry with selling the pizzas. Guess what you know. There's Domino's. There's Pizza Hut. and there's other pizza shops, whatever that that are all competing for your pizza dollar on a Friday night. So actually, a poor experience can mean. The Pizza Hut websites down you go and buy a Domino's Pizza instead and then the risk is they don't come back. You know, if you enjoyed the Domino's Pizza, go next time I'll just buy Domino's. And I know their website works anyway. So there's that that kind of side. working with clients and also just lots of different personalities and cultures to work with and different budgets. You know, we've got some clients that, they just want a Unicorn at the lowest possible price. There's others that are happy to pay for quality within reason. Of course, everything's you

There's others that are happy to pay for quality within reason. Of course, everything's you know. Ultimately within a budget, and the other thing too is dealing with timeline so that that's twofold with clients in in our consulting work, Or can you just get it all done this week,

even if it might take, you know a couple of months, so managing those kind of expectations and the other kind is also. Managing their expectations about how quickly you can start at in consulting we have something like called a bench where there's some people that are that are there not assigned to a project ready to jump onto another project. It's very difficult. It's kind of like if your bank balance. You've got a bit spare, but you can only deal with so many emergencies before there's no money left in the bank. It's kind of like that with the bench as well.

So yeah, sometimes we get these calls and people love to ring at 5:00 o'clock on a on a Friday evening and say can you start can you? Can you start a Monday at 8:00 o'clock? And expected to pull a rabbit out of your hat. Thankfully, sometimes we can and we try and manage our outlines expectations. But there are times where actually the skill set that they need by not be available for a period of time, and so you're always like negotiating with them about what we can do and how we can help them achieve their goals.

Jaejun:

it's just out of my curiosity Who are your main clients?

Reuben Korngold:

we do a lot of work with government and that's both at a state and a federal government level. Lots of different government departments, also superannuation companies, banks. As I said, like ticketing, you know, movie theatre's retail. And I mentioned Foxtel before, so yeah, it's really right across the spectrum of companies.

Some companies are, you know, bigger summer. Smaller because we're a consulting firm. Really small companies. We generally don't deal with because they you know, often you know when companies are start-ups their budgets are a bit tight too to be able to afford to start getting consulting professionals to come in and do stuff for them.

Jaejun:

What aspects of your work do you spend most time on? Please tell us about these.

Reuben Korngold:

Yeah, OK, uh, a lot of time talking. And even when I, you know it's some, sometimes as as we can do now, we use Microsoft Teams quite a lot, so you can. You can do it anywhere. I know often when I work from home, the family is always shocked at the number of calls and then the incessant talking that's required across the day and sometimes. The problem of work you generate, which is a good problem to have,

but it also becomes a time management challenge as well. About when am I going to do all these things and what's the most important thing to do first? I guess off the back of that and get more focused on selling our services than actually doing them.

Is writing proposals. So after we talk to people we have to put some kind of proposal together and in a similar vein, some organisations, both government almost always and private companies.

Regularly as well put out for the larger pieces of work. Put out tenders so it's it's kind of like a University assignment. There's a There's a set of questions and answers all questions that that they put on you have to provide the answers that can become quite difficult.

One because they can be quite onerous. I think the worst one we did was like about I was about a ream of paper that was, 500 sheets that we had to submit for that one. So some of them are, you know, can be quite involved, but then they're worth a lot of money,

so you sort of under understand and also like you probably experienced in assignments, they

have word limits and. There are times also that they just cobbled questions together and. The questions they're asking either don't make sense or the

word limit they've given you, but they might just say there's no more than 500 words for any question, and some of the questions they ask you probably couldn't really give a justice to the answer within that. That kind of word limit, so you know it's always about sometimes being creative about diagrams and things. But then, if you draw diagrams, one of the things we always try and do then is make it. Look consistent that even if different people contributed, it has to kind of flow just like a group assignment. Ideally, nobody should know that different people wrote different parts that should all just flow together nicely. So yeah, that's something else that choose. Choose a lot of time.

Peter:

I really like that that consistency. I think that something could definitely take back to ours assignment as well, like we're all doing different things, but I think if we try to make it look as professional as possible and consistent, just like you've, said that would actually probably help us.

Jaejun:

That's a good point.

Reuben Korngold:

and from that end and very similar to a group assignment, that means the only way that you can actually do that is if you. If you have enough time at the end if you don't finish your part, Peter until 5 minutes before it's due, then it won't work. and that's and that sometimes the it's the same.

You know we the tenders also have a deadline. It's two or three PM on Thursday afternoon. Sometimes you don't have a lot of time to do them. You've got, as I said, my phone keeps ringing. I'm trying to do this. You know, there's a there's a few late nights when those things come, but one of things we ideally like to do is actually have it done a week earlier where possible, so that then you've got the time to actually review it. And improve it, because otherwise when you Chuck it all together and you go. Actually, this doesn't make sense.

I need to improve this bed and actually

the way this is worded and Dan this diagram looks different to that diagram. You know, let's change the colour scheme whatever. Get somebody to do that for us. But if we want somebody to do it for us, they also have other work to do. So we need to obviously give them some time to be able to. To do that, and that only happens by pulling everything together a bit earlier. Like anything though, and you know it's you do the best within the time allotted, but we win most of them so we do alright

Jaejun:

Which aspects of your work do you find most challenging?

Reuben Korngold:

I think the first thing is that every project and every client is different, so we always have to adapt to . what's going on and similarly like the tendering process, when we're actually delivering projects. Sometimes you know the challenges we're throwing. From a different and even. Impossible. If you were to do it properly and then you start going well.

Sometimes the right thing to do is to say, you know, to help manage people's expectations

and tell them look you need six months to do this.

You've got six weeks. What we can do is improve you from where you are today, but All bets are off that actually you're not going to get to where you really should be in the in the amount of time that that's. Similarly, there is when we're asked to get involved in things and you just go. I don't want to. Well, I actually say no, we don't. We try not to do that, but there are times and there's times where you thankful like the census, for example, where if they are unwilling to do it properly and they just want you to be on the hook to now be involved in in in their mess. And they're not willing to work in a way that we feel is good. Then it's better to say no to the business than take on the bad business. I'm I think the other thing too that I touched on is is managing your time.

That's certainly difficult. I mean IT. When is, IT projects it's rarely and a nine to five kind of job. If you want to be successful. So unlike shift work where shift starts at a specific time and ends at a specific time, technically you or IT job might. But you know what? If you're building piece of software and you need to get your component built by Friday, we all know. Sometimes things run smoothly and other times. You know there's extra debugging to do. There's something else that comes up and certainly for myself too. I find all those phone calls can be quite disruptive, and when you've got meetings and then you've got half an hour in between meetings, it's not necessarily the right headspace to be able to do productive work, so it's keeping that balance there and making sure or trying to keep some. Down time for yourself to sort of recharge.

Peter:

Very importantly, don't turn out.

Reuben Korngold

Yes, yeah,

but projects are very cyclical. There are times where it's just you know one week after another. It's just a marathon. But then you've gotta look for the times later when you know you can bask in the glory of the results and then kick back a little bit as well.

Jaejun:

Finally, can you share an example of the work you do that best captures the essence of the IT industry?

Reuben Korngold:

I've got two for you, The first one I'd say is. Have you guys heard of Y2K?

Peter & Jaejun:

Yes, yeah

Reuben Korngold:

So Y2K or that was just, why do we have to abbreviate it? But it's the year 2000 problems, so a lot of software built. Last millennia, that sounds funny saying that, but you know, build. Let's just say from the 1950s. Onwards. They because of the limited memory that was available in computers. They basically decided to use a 2 digit year. So instead of 1990 they used. 90 and they actually stored it internally in their in their computer system like that now. Wasn't really a problem, but when you start doing things like. A date range and calculating say your credit card interest and you go the 1st of January 1990 to the 1st of February 1990. Pretty easy. However when you start doing that

from1st of January 2000 or 00. Yeah, from 1999. That doesn't work so well, and particularly things like banks, credit cards, mortgages, all sorts of things had big problems so that there was, you know, it appeared advises the IT industry we build something, and then we had to get paid to repair and change an remediate. All that software so that to make it a four year. A four-year, 4 digit year instead of a 2 digit year. So there was a hyper work across the world and you know I was in involved in in doing some of those repairs and afterwards you know people who weren't in IIT said oh it was all just a fast. Nothing broke anyway without realizing that people had spent three or four years actually making sure that nothing did break.

So that that would be one that's. more recent,

I mentioned Foxtel. We got a call about six weeks before the last episode of last season. Sorry of Game of Thrones. You know, I'm sure you guys probably watched Game of Thrones, or at least heard about it. So yeah, they run up and they basically said somebody asked somebody. Oh is the system going to perform?

And everybody looked at each other and then they realized that they hadn't even thought about it. Six weeks out and run us up. And when we started to have a look at what needed to happen, this was one of those stories where you should have run a six months ago because now six weeks is not enough to sort this out and just in in rough figures they were expecting the most that ever had of people streaming video on their platform was stay around300,000 people at the same time. What we say concurrently. And then they said, well, they want to make sure you know that it's probably going to double because people were so crazy around the world for watching Game of Thrones that they thought they'd get

double the traffic that ever had before. Now aged HD or high definition videos, streams use a lot. And you know, there's a lot of software there, and that we had to make sure. So you know, basically, we had to come in, we had to be practical first of all, and say we'll do our best to help you to reduce your risk. But we're not making any promises here. And we did stuff that that's basically never been done in in Australia before. It was across right across their platform. A lot of people told us we couldn't do it and we did it anyway. Sort of had to force it through. We're working with the Chief Operating Officer of Foxtel, who basically said Reuben, you tell me anybody who tells you know, and I don't care who they are. I'll make sure that they that they changed their answer to yes, so we had to work with lots of different companies. We had to work with people like Telstra who provided the network we had to work with Akamai. I don't know if you guys have heard of. Akamai which is a content delivery network you might have seen the message there sometimes. They're kind of like any a case for the world wide Internet, and they store the videos basically for Foxtel.

So we basically had to look at the whole end to end picture, look at things like the ordering platform to make sure that enough people, people these days they want to sign up five minutes before hand. They didn't sign up for Foxtel. Like last month they wanted to sign up just. Just before the launch of the show, so we expected at a peak amount of traffic, like the pizza scenario were talking before, but then actually then you have to look at the single sign on there. There's authentication with the Microsoft Active Directory that that stores people's credentials to log in. When you log in, there's all kinds of marketing systems that work out, you know, the carousel of shows that come up that. If I login or you log in, it will show different things about Watson Watch. Next all of that kind of stuff actually presenting all the images of the thumbnails of all the images.

And also we learned too that when you press play on one of those things, it doesn't just download the movie, or in fact it doesn't download the movie as we learn. It streams it in very small packets, but that happens dynamically depending on your bandwidth.

Depending on the system. Depending on it thousands of different.

Does so that the packet size actually goes from small to large and even the quality you might have seen this so if you've got a dodgy Internet connection when you're watching a movie. Sometimes the quality gets more grainy or whatever, because that's making sure one of the things with video streaming it can't. You can't have the spinning, we've seen it where it spins and it you know you're just waiting for the for it to load. You try and avoid that happening as well. There's licensing so. You know, it's like digital rights to actually say, you know that the people got paid, paid per view basically so. Yeah, so there are a lot of different things that

we had to do. We basically ended up testing about one terabit per second of traffic across the Internet. We got a warning letter from a WSM, Amazon, Amazon Web Services saying you were generating too much traffic. There was a heap of different things that ended up happening. Telstra said no, they didn't want us to do it. The people from Foxtel basically said you better do it or we'll go sign up with Optus instead. And basically everybody said no, but we were able to do it and the nice thing was we actually did about five times and the reason why we did this testing about five times of doing, you know, close to a million concurrent video streams was because the first time it didn't work. And we found a problem. And This is why you test things right here is because you try it out. It didn't work. And then we worked with the people they made some fixes and we did it again and we did it again. Did it again until we got to the point that it was.

It was good and because of that unlike the World Cup that Optus streamed a number of years ago that that failed because of their platform couldn't handle it. Thankfully that didn't happen to Foxtel. However, we know because we had to test it five times. If we hadn't have done that work, they probably would have ended up. In a in a world of pain, a lot of unhappy customers, people getting upset you know couldn't watch their favourite T shirt TV show.

Why am I paying this company so much money for, you know a subscription when I can't when I can't use it all that all that kind of PR you know public relation right? That ultimately would mean people will leave them and I'll lose money.

Instead they had one of the best days of business they ever had, and instead of bad publicity, it was all goodness for them. So yeah, that I think you know it's all about helping companies achieve their goals and ultimately, in fact I put this picture up in the in.

In the presentation I gave to them. You know, the family sitting on the couch eating popcorn. And you know what what's Foxtel about?

You know, being a a video streaming service these days Or cable TV. In the old eyes, it's all about the family sitting on the couch and enjoying if and that's what you've always gotta put at the center. It doesn't matter what kind of system you building, you've gotta think about who's the person actually, you know, going to live this experience.

And how do we actually help that happen? So yeah, that that would be, I think. The best example of the essence of doing a great job in IT.

Bonus question: What's the one program you could recommend us to learn that will help us get into the IT industry and that's in high demand?

I think technical skills are important, but technical skills alone it is not enough either. It's also really about attitude. So I would say at least two things technical skills and the right attitude. And the reason I say that is if you only know how to do one thing. You will struggle in the IT industry. But at least if you know multiple programming languages, you're adept at changing to a third one. So pretty much saying it's not about being able to perform any specific technology, but rather learning and adapting to a new one. When I was at Uni, I learned C and Pascal and COBOL as well. Now COBOL is still around in places like banks, government agencies, any slow-moving organisations. It's getting less and less. But again, if you're a COBOL programmer and you didn't move with the times, then you would probably be struggling for work right now. Every few years, there is always something new to learn. That's why a learning mindset is so important. It's much easier to adapt to the next greatest thing that comes along.