1:41

Alexey

**This week, we'll talk about preparing for a technical data science interview. We have a special guest today, Luke. Luke is a co-founder of Neural AI, a company that specializes in recruiting data scientists and other AI professionals. He has over 10 years of experience working with recruiters and what’s more, Luke is also a podcast post. He's hosting the AI Game Changer podcast. Pleasure to have you.**

2:20

Luke

Pleasure to be here, for the second time! I feel like we just do podcast episodes with each other now. We really need to get other guests. [laughs]

2:29

Alexey

**Exactly. Yeah, I was going to mention that. Luke is actually on the podcast for the second time. Luke is one of our very first guests. I think you were like third or fourth. I don't remember. The last time I interviewed you, it was two years ago, when the DataTalks.Club podcaster just started. It's been a while. Before we actually start, I want to mention that the questions for today's interview were prepared by Johanna Bayer. Thanks, Johanna, for the help. Let's start. Luke, tell us what's up.**

# Luke’s background

3:03

Alexey

**What have you been up to since we spoke last time? Maybe also tell us in your words about yourself before that.**

3:12

Luke

Yeah. Maybe I can give you and the listeners a bit of background about me. As you’ve quite rightly mentioned, I've been in recruitment for well over a decade now. I've got the gray hairs and the crows’ feet to prove it. But historically, I used to help companies find data professionals, but more from kind of a traditional BI/descriptive analytics-y focus.

Over the past 10 years, that's kind of transitioned and I've worked with the market. Over the past, maybe six years now, I would say that I've had three key focuses. Number one – machine learning or deep learning at the core of all of the engineering hires that I've made. And obviously, that would encapsulate all of the other bits around that traditional data science or data engineering and everything else in between.

I've worked pretty much exclusively with early- to mid-stage startups. I don't do much in the corporate space anymore. As I said, I tend to work with smaller organizations that really need me. And then lastly, I do most of my work in Germany. I'd say that 90% of my work is in Germany. Since the pandemic, I've broadened out to Central Europe as a whole, but I've still got my core client base in Germany. So yeah, that's me.

4:40

Alexey

**But you're not based in Germany, right?**

4:42

Luke

No. I’m in Kent, if anyone knows where that is – it's a really beautiful part of the UK. I don't know if you can see, actually, in the background – I've just had the office renovated and stuff. Really happy about that.

4:58

Alexey

**I'm just curious, how does it happen that recruiters from the UK work in Germany?**

05:05

Luke

This is a bit of a long story. [laughs] I will try and condense it.

5:09

Alexey

**You’re not the only recruiter from the UK who works in German. It's quite a trend. I don't actually know many German recruiters.**

5:16

Luke

Yeah. The story is – I'll try and condense this as much as I can. I can't remember when it was. I don't know what year it was. But long story short, I was moving to Australia and in the time, I joined the company in Australia, and in the time period of me waiting for my visa to come, they went “Look, why don’t you join us and work with our German business and help us do some business development and win some clients and do some recruitment in Germany in the interim of you moving over to Australia?”

In that interim period, I met Rachel, who is my co-founder, girlfriend, and life partner. As I said, it got to a stage where I was like, “I'm moving to Australia and blah, blah, blah.” Long story short, it kind of worked out that I actually just stayed in the UK, and I really enjoyed working with German clients and German people in general. So it just continued from there. That was a very condensed version. Serendipitous, I guess. But yeah, it was cool, man.

6:16

Alexey

**Okay. Do you remember what we spoke about two years ago?**

6:22

Luke

Standing out as a data scientist was the topic, right? [Alexey agrees] But yeah, the specifics, man… you're gonna have to remind me. [chuckles]

6:30

Alexey

**I don't remember myself. [chuckles] But yeah – what were you up to these few years? What changed? Apart from the new office.**

6:41

Luke

To be honest, not much has changed since we last spoke in terms of what I do on a day-to-day basis. I think now, as an individual and a business, I feel a lot more embedded into the community. Obviously, I've been running the podcast, already releasing a lot of content on a weekly basis, and I feel like I'm much more well-known in the industry now than what I was three, four, or five years ago. I think that's largely due to now that I've worked myself… [cross-talk]

07:09

Alexey

**The podcast, right?**

07:10

Luke

Well, yeah. [reluctantly] That's kind of a big part of it, as well. But I think largely, when I used to work for other organizations that were a lot more corporate and bigger, I had to be a recruiter for that business, but now I feel like I can be exactly who I am and all of my content and what I do and how I've worked with customers and people, it reflects that. I feel like I'm just much more well-known in the industry now than what I was when we first spoke.

As I said, I think that's largely due to just being able to be myself and do what I do without having ultra amounts of pressure from directors and the organization to make placements at all costs. But on a day-to-day basis, I do recruitment and I work with my customers and we make placements and it's really good fun. As I said, it's been fun. Did we talk at the beginning of the pandemic? I can't remember when we actually recorded that podcast, but that was probably the worst year of my recruitment career.

8:18

Alexey

**Two years ago. Now it's 2023. So it was January 2021.**

8:24

Luke

Yeah. We’d probably just come out of the worst year of my recruitment career. And we were probably just stepping into the best year of my recruitment career. Yeah, it's been fun, man. It's been good.

# Luke’s podcast - AI Game Changers

8:35

Alexey

**I’m glad to hear that. So tell us about your podcast.**

8:44

Luke

Yeah. So the podcast was spun off in the midst of the pandemic. My job became pretty redundant. I didn't know many companies that were hiring, and the ones that were hiring definitely were not using external headhunters to find talent. For probably about nine months, I was just like, “Shit, I just don't know what I'm gonna do now, because most companies don't want to use me. It's all known for. What am I going to do?” The podcast spun out of “Look, in that time period, I need to do something for the community. Right now I can't offer them jobs. I can't help them get new jobs. So what else can I do?”

I've always toyed with the idea of running a podcast. But to be honest, it was always kind of a side note for me like “If I get time to do it, then it'll be something that I will do.” It kind of always got pushed to the side. I think 2020 was the best chance to launch something like that and I'm really glad I did. It's really cool. Again, I've just talked to AI, data science, and machine learning leaders in Germany, in Central Europe, about their journey within the space that we were working in. Typically, I'll talk to early stage founders and we'll talk about their journey from the first initial concept up to where they are today in their journey to get there. Yeah, it's going on, man.

To be honest, after the pandemic, work completely exploded. I had to take a bit of a backseat on the podcast for a bit, which was probably not my best decision because we got it up to a really good stage and then I dipped off because I was just so busy with work. Now we're gradually getting it back up there now. We run everything on video now. It's a slightly different angle than what we had before. But if anyone's keen, the difference between what you do and what I do is that yours is very practical – people can actually learn from the DataTalks podcast in one way, shape, or form.

My podcast is a little bit more about stories. I really want to explain the journey of organizations and give people an opportunity to share their story, what the business does and ultimately, just illuminate the companies that are working in the AI community in Germany. If you're interested in stories, maybe not necessarily learning, but interesting conversations, then it's probably cool to check it out. But if you want to learn stuff, stick with Alexey. [laughs]

11:28

Alexey

**One does not exclude another, right? [Luke agrees] I’m wondering if we look at the number of podcasts created over each year, there must be a spike in 2020. This is when DataTalks.Club podcasts also started. Probably everyone was like, “Okay, pandemic. What do we do? Let's start a podcast.”**

11:48

Luke

Yeah. Probably boredom had a part to play in that, right? It's just something to do. But… [laughs]

# How Luke helps people get jobs

11:54

Alexey

**I don't know if it's just boredom, but maybe a need to be connected? [Luke agrees]. Well, you said during the pandemic times, you wanted to do something for the community, but you couldn't help them get jobs. So you decided to do a podcast. But now, you can actually help them get jobs, right? How do you do this?**

12:19

Luke

Clients typically work with me on positions that they find really difficult to fill. These are traditional data science positions that don't get a lot of work in that kind of space anymore. Usually, what happens with most markets is – as new things come into the machine learning data science world, there are fewer and fewer people at the beginning of that bell curve of that particular thing. So usually, clients work with me at the beginning of new things that happen in the market. To give you an example, ML Ops is a really hot topic for me right now. Most companies that I'm working with, I'm looking for someone or some people to help with infrastructure and the operational side of ML. But if you ask me the typical roles that I recruited for like five, six years ago, I'd say data scientists and big data engineers.

My role kind of transitioned with the market. But yeah, customers work with me to find niche hard-to-find people. My role, essentially, is to be an intermediary between the customer and the individuals that I'm representing. In a slightly different way than what most of the recruitment industry works like, I only work with two to three customers in one go. I'm only one person, so I can't work with 100 customers at once, otherwise, I just wouldn't be able to service them. I work with two to three customers at once and I work really, really closely with them. The way that I typically try and frame it with those customers is that “I am your embedded AI talent specialist for the time that we're working on a particular project together,” but externally, with the candidates that I represent, I try to be as involved in the job search with individuals that I've worked with as possible. What I don't want to do is just be like a job filter for people – to just send them job specs and just coordinate interviews. That's really not what I want to do.

This is gonna sound a bit cheesy, but what I really want to become known for is that I'm a seminar career coach. That does sound super cheesy, but ultimately, I think if you've ever worked with me before, you'll know that I pretty much help you with every single stage of the process – be that the intro stage, be that technical, how to speak to VPs and senior management, often negotiation and closing. I’ll pretty much hold your hand through the entire interview process from the very, very get-go and I’ll pretty much walk people through the stages within all of the companies that I've worked with. If you've ever worked with me before, I hope you would agree with that. [chuckles] So, as I said, I work pretty much in the middle between customers and candidates, but what I try to do is work really, really closely with the people that I work with.

15:23

Alexey

**I cannot say publicly if I worked with you, right? [chuckles]**

15:31

Luke

No. [laughs]

# What’s changed in the recruitment market over the last 6 months

15:32

Alexey

**Okay. [laughs] We should probably go through each of these – as you said, there's the intro stage, technical stage, talking to management, negotiation. I definitely want to cover all that. But before that, I have a very interesting question. Right now, the market for all the tech jobs seems like it’s going down, right?**

**What I want to say is, I see companies doing layoffs, getting a job is harder – the market is shifting from being the candidates’ market to the companies' market. It's harder and harder to find a position. For you, as a recruiter, what's changed in the last six months?**

16:20

Luke

I can only talk from my own personal experience, but being really honest, I've not noticed any difference. In big tech, of course, everything's on fire at the moment. There are tons of layoffs happening, and no doubt people are really affected by that. But the work that I do right now? Honestly, it's not any different. This week, I’ve brought on… Well, I mean, there are potentially another two to three customers that want to work with me right now. So I'm still at capacity all the time.

That said, I don't work with everyone, so I might have a very small window into what the market actually looks like. But for me, though, the customers that I'm working with are still hiring. They've got the funding to do so. Maybe I'm just lucky in the fact that the customers that I do work with are in really good positions. No doubt, there are different stories across the whole market. But for me, personally, it's pretty good. Touch wood, I hope that continues. [chuckles]

As I said, right now I feel like I'm in a pretty good position. I feel like the clients I'm working with are in pretty good positions. It's really difficult to say because I don't know the entire market, but this small subsection of the clients that I've worked with and who I know are in the market… it seems fairly similar, bar a couple of little events that have happened. But generally, I can see the market kind of bouncing back from it the next couple of… I've seen this happen throughout my career, pretty much every single company that I've worked with – you get huge layoffs, there's tons of shit on LinkedIn about the markets and fire and “there's going to be a huge recession period” and stuff. And then in six months time, everything is back to normal.

I'm not worried about what's happening out there, I guess. But maybe that's super naive and really ignorant. From where I'm sitting right now, man, the market’s still on fire, especially if you're good at what you do. There's always going to be opportunities. If it's not there, it's going to be somewhere else. Right? So yeah, from where I'm sitting, it seems pretty good. People are probably shaking their head at me right now thinking, “Well, you don't know what I know.” But I don't. So, yeah.

18:49

Alexey

**It's good to be an optimist. Right? That too. [cross-talk]**

18:54

Luke

Yeah. A blind sort of optimist. [laughs]

18:57

Alexey

**From what you said – the budgets are still the same. They are not reducing budgets, so candidates can still get the same salaries as they were getting previously. You still have clients, the clients have money, and they are in a good position, so for now, you don't see any reason to worry.**

19:18

Luke

I don't think we've seen the full flow-down effect of what's happened in the market. It's too early to say right now, right? It could be a very, very different market in the next six months. What I know right now is that not much has changed from my side. I'm not really seeing any trickle-down effects just yet. What that looks like in 6-12 months, I'm not sure.

19:44

Alexey

**Maybe it became easier to close positions because there are more candidates on the market? Or for the positions you work with, it's as hard as it used to be? Nothing’s changed?**

19:58

Luke

Yeah. [laughs]

19:59

Alexey

**Still hard, right?**

20:00

Luke

Yeah, I don't think I would have a job if it ever became easy. If there were a huge influx of candidates on the market that made me redundant, people would get them directly. They would just hire them directly. But I think the true value in working with a headhunter is not necessarily the presentation of candidates. It's much more about the process – ownership from end to end, both from a client and from a candidate perspective. There might be more people on the market right now. But then, there's still the same amount of competition going after that talent, so that doesn't change. It's a bit messy right now. I don't know exactly how that's going to transition over the next 6-12 months. But for me, I've not really seen anything where I’m like, “Oh, shit. This is a big change.”

To give you an example, when COVID hit, that was the biggest shock of my entire career, where I was like, “This is awful. We can potentially go out of business and I could run out of money.” Right now, with looking at the current pipeline that we have, just what's generally the energy in the market – if anything, I'll probably hear a little bit more from a candidate’s perspective that they're a little bit more apprehensive about going to startups and companies that don't necessarily have a route to profitability. There are a lot more questions that are focused on funding and stability and stuff like that, that I didn't really get in 2021. Well I did, but not as much as now. It's probably a little bit more common to think about risk on the side of the candidates right now. But generally, as I said –I compare everything to COVID now. I'm just like, “Is it as bad as March 2020? No.” So it's not too bad. [chuckles]

# Getting ready for the interview process

22:02

Alexey

**Okay. Well, the topic today is technical interviews, right? You said that you, as a recruiter, are quite involved in the interview process. What you do is help the candidates at every stage, which you mentioned are: introduction stage, technical interview, then speaking with top management (VP, directors) and then finally, the negotiation stage. Can you walk us through the stages? What happens at each of these stages and how do you help candidates there?**

22:42

Luke

Yeah. That's quite a lot. I just want to work out where we need to start with that so people don't get overwhelmed with information if we did the whole thing. If we break that down, I guess, and just do one stage at a time. Personally, I think that there are different expectations for, obviously, all of those stages. I think the prep needs to be associated with what we're trying to achieve in the individual stages. I think if we just make some assumptions, because I'm going to talk really broadly. There are going to be some companies out there where this is not going to make sense for. And there are going to be some situations where they're a bit abstract and a bit left wing.

I think the challenge with interviews is that, if you've interviewed at 100 different companies, you'll probably get 100 different experiences, or at least 50. So take everything that I'm saying now with a pinch of salt. I think I put a post out not too long ago – if anyone wants this document, I'll happily send that to them. And if anyone wants to talk to me about it directly and ask me specific questions about specific interview processes, I'm more than happy to help. But anyway, that's just a bit of a caveat. I think the assumptions that I've made are – this is pretty much focused on junior to senior-ish level hires. Anything principal (lead management, any of those highs) there's a different level of prep and different levels of expectations. I'll push that to one side.

Number two is that, the interviews that you're going to, you're actually capable of doing that role and it's a logical step. If you're a junior engineer and you're prepping for a CTO role – you can prep until your eyes for it out, but that's probably not going to happen, right? So number two – the roles that you're interviewing for, you're capable of doing them. It's a role that you want, not just “an interview”. The process is fairly standard – three stages: intro, technical, final stage (senior management, VP-ish) kind of interview. That's typically what I see. Maybe there are two stages in the technical part, but generally, that's the process.

The last assumption that I make is that you're working with someone who's semi-decent at giving you some information. So you're working with either a good recruiter, a good internal person (a good HR person internally) or the manager that you're working with, from a technical side of things, is a good person or the founder or whatever. But you've got *a* contact that's associated with that business that you can strip information from in some sort of way. It's not always the case, but 9 times out of 10, there'll be someone in that chain that you'd be able to speak to. Does that make sense? I'll feel like I rambled my way through that.

25:45

Alexey

**Yes. But maybe we can go to the actual stage, right?**

# Stage “zero” – the filter between the candidate and the company

25:50

Luke

Yeah. Do you think those are fair assumptions, though? [Alexey agrees] Yeah, cool. The intro meeting is obviously going to be the first stage with all candidates.

25:59

Alexey

**That’s with you, right?**

26:02

Luke

No, I don't class me as a stage in the interview process.

26:05

Alexey

**So that's like “stage zero,” sort of – the initial chat with you. When you reach out to a candidate, you say, “Hey, I'm working with this client. They have this awesome role. How about we connect?” [Luke agrees] You reach out, then you have a conversation, so that's stage zero.**

**You understand that, “Okay, the candidate wants to try this position.” What do you do? You show the CV of the candidate to the company? They say “Okay, let's interview that person.” And then you arranged an interview. Then this is where the introduction stage happens, right?**

26:43

Luke

Yeah, correct. The companies that I work with now, I've worked with them for quite some time. Usually, I'll just put people into the diaries, because I've got such a good understanding of what they're looking for. I'll send the CV, just to be polite like, “Hey, man, I'm booking this guy with you. If you have any questions, let me know.” But I'm kind of at a stage now where the customers that I've worked with, I just know them inside out. There's not really much guesswork in terms of the work that I do now. But anyway – exactly.

The way that you should look at me is that I'm a filter between the end client and the candidate. I'm not an interview stage. For me, I really want to understand what makes you tick as a candidate, because you might say some things to me that I think “You know what, then that's not going to work with this customer, or that's not going to work. That's not the right role for you. There's going to be better opportunities out there that will give you that kind of thing that you're looking for.” And then vice versa, if there's parts about the cultural fit or if there's parts about the technical skills that I know that they definitely need, that are going to be an instant project, then that's my job to not put forward people that are just totally irrelevant. So that's where I sit.

# Preparing for the introduction stage – research and communication

28:06

Luke

First stage is obviously always going to be the intro meeting. Again, there are going to be different ways that companies run this, but typically, it’s 30-40 minutes of conversation. I guess the key thing that most people are trying to get to in the intro stage of an interview is, “Is there synergy between us as an organization, the role that we have open, and from a personal perspective? Does this make sense?” That's kind of the main goal, but from both sides. The prep of that… if you've got any specific questions that you want me to answer about that?

28:46

Alexey

**What does it look like? Is it like, “Tell us about yourself?” Or is there more structure?**

28:53

Luke

Yes. Well, the typical questions that I see are really broad, open-ended questions like that. But if we're talking about prep, specifically – for me, I think it breaks down into 3-4 elements. Number one is the person and character that you're going to be speaking to. Because ultimately, in an intro meeting, as much as it's about outlining the skills of who you are and what you do, it's about building the relationship with that person. Because if you get off a call with someone, and you have that kind of internal feeling like “Yeah, that's kind of the thing that we're looking for from both sides, but he/she was a dick.” That's not really gonna go past that first initial stage. Point number one is going to be about the character that you're going to be speaking to and the relationship between those people. [cross-talk]

29:55

Alexey

**I’m just trying to understand how it helps me as a candidate. Okay, I know that the person I will be speaking to is a data science manager in this company (for example). What are my actions? Do I research them on LinkedIn? Do I think about what is interesting to them? The way I tell my story, do I use the same language that they will relate to? How do I use this information?**

30:26

Luke

There are two elements to that. It's the pre-research and the immediate things that you do on the call with that person. If I was going to interview you, Alexey, you're a brilliant example of somebody that you can actually research. For a lot of people, it’s difficult. But the first thing I do is I really try to understand the person that I'm going to speak to. Number one, I would ask the recruiter (or the internal person that I'm working with) “What's Alexey like?” Really, really simply, “What kind of characteristics does Alexey have? What type of communication style has Alexey got?” I'd really want to try and gauge who you are before we jump on the calls so there's as little surprises as possible.

The person internally that you work with, or externally as a headhunter, I would be stripping that person for information because I want to know that when I jump on that call, “Is this guy going to be an extroverted, hands-waving-in-the-air kind of person? Is he going to be super direct and just get straight to the point? What type of character am I actually going to be speaking to here?” Because I think the key thing that you need to do in that scenario is work with the person that you're talking to. If we've got an ultra direct, straight-to-the-point manager of something, and you go in there and you want to shoot the breeze, you're just gonna annoy that person. But then equally, if it's the other way around and you're super direct, and you just want to get straight to the point and get to it, but the other person's like, “Hey, man. How's your day going? What did you get up to on the weekend?”

If you don't match, or try to at least match, the energy of the person that you're speaking to, there's going to be friction. The point I'm trying to make about researching the person before you actually jump into the interview is – there are a lot of signals in terms of how people communicate. It will be very easy to work you out because you've got podcasts – you can watch them and you can see how you can communicate.

32:27

Alexey

**But it doesn't mean that I behave like that in an interview, right? Then again, I probably do. [chuckles]**

32:36

Luke

I would imagine you probably do. Maybe there would be a slight gear shift, but I would say that around 80%.

32:46

Alexey

**You’re right.**

32:47

Luke

The way that people communicate online gives you a lot of signals about how that person is going to communicate in real life. Even the way that they would explain what their roles are on LinkedIn, for example. I do this all the time, but if I jump onto a LinkedIn profile now, and I'm making huge assumptions here, but usually, I can get a really good feel for that person before we even jump on a call. Then when we jump on it, I’ll see “Oh, yeah. That kind of makes sense.”

Just in terms of the communication style, how they write about what they do – just that their writing communication will typically fold over to who they are as a human being. What's the point? Sorry, I'm rambling here. Before the intro meeting, I want to really understand or try to gain as much information about the type of person that I'm going to be speaking to – not about the topics and the content. [cross-talk]

33:41

Alexey

**You do this, right? I guess, in this case, when you're working with the client and you’re helping the candidate, you already did this homework, right? Then you would tell the candidate, “Hey, this is the person you're going to speak to. This is their personality. They prefer to be direct. So get to the point.” [Luke agrees] But let's say if somebody is not as lucky to work with you, say they’re going through a different process, then this is something they can do on their own. They can look at the LinkedIn profile, look up the person on Google, maybe there are some podcast appearances or talks, maybe there is something that can help to understand the personality of this person.**

34:33

Luke

Yeah. Don't get me wrong, this is not an exact science. So it's not something that if you follow this process, you're gonna get it right 100% of the time. Some people just don't even post on LinkedIn and they've got no online community. So how can you work out anything from that?

34:48

Alexey

**Or no online presence at all, right?**

34:49

Luke

Yeah, exactly. So don't get me wrong. But you want to use these as signals. You don't want to make any absolutes before we jump into that call. You want to think, “I *think* this is the type of person that he or she is going to be like.” If you can kind of get to a stage where you're like, “Well, this is the type of person that I’m gonna be talking to. This is the type of character. This is the type of personality.” You can start to adjust how you communicate to that person. But the second part, in terms of the intro meeting, is that you need to really quickly assess the person on the other end of the Zoom call, or directly in front of you, or on the phone call, within literally seconds of speaking to that person.

People will tend to communicate in the way that they want to communicate. If you ever have a zoom call with me, I'm like, “Hey! How's it going?” And that's how I communicate as a person. I'm full of emojis and I'm super expressive and that kind of stuff. When someone links with me on that, the calls really do well. But when I have a call with someone, and I'm like, “Hey!” and they're like, “Hello. [stoically] I'm like, “I need to change the way I am right now, otherwise, I'm going to be jarring for this person and they're going to think I'm a dick.” There's a website that I will send – I'll put it on the document – It's called 16 Personalities, which is essentially psychoanalysis of different personality types, and different communication styles. I recommend it to anyone who's interviewing to really try to understand at least their own, but have a good understanding of who other people can be and how they like to communicate.

Because the first initial 10 seconds of conversation, if you don't pick up on that, and then you continue going down a road of jarring, completely different energy level, be that one way or another, the call (again, I don't want to be in absolutes) but 9 times out of 10, people will be on opposite ends of the spectrum in terms of how they're trying to communicate to each other. So for me, I always try and work out the personality character and the person before I do any prep. Because the way that you communicate to that person is going to be one of the most important things you can do. The content is obviously important, but if you deliver it in a way that doesn't land, it's kind of irrelevant.

37:10

Alexey

**Also it's important not just for interviews, right? Pretty much everything else too, like meeting, networking, etc.**

37:22

Luke

Yeah. Yeah, exactly. There's probably been times in everyone's life where they've had a conversation with someone and they just instantly click. They're just like, “Phew. We get each other. We're on the same wavelength.”

37:38

Alexey

**Probably they have the same personality, right?**

37:41

Luke

Yep. It's the same communication style. You’re singing from the same hymn sheet and you're communicating in a way that the other person likes to communicate and understands and it's natural. But in interviews, obviously, you don't have the privilege of choosing who interviews you. It's not like they're one of your friends or whatever. So you have to deal with the person in front of you. And I think that understanding the personality type of the person that you're talking to, doing your research about that individual will give you at least a good start.

# Reviewing the fundamentals during preparation

38:14

Alexey

**I took a look at the time and realized that the topic for this interview is technical interview. I love the topic. This is really interesting – 16 personalities and how you assess the person. Anything else you want to mention regarding the intro meeting before we move on to technical?**

38:35

Luke

Yeah, there's one more thing. Typically, you'll have standardized questions: “Tell me a bit about you. What's your background? Tell me about some projects that you've worked on. What are you looking for?” All the normal everyday recruitment stuff. One more final thing on the intro call is – there's a lot more in the document, but just one more for now – I would highly recommend standardizing your answers to that and practicing them so that they are really fluent and so you can articulate who you are, what you do, what you're looking for, projects you've worked on, examples of things that you've done – just on demand. So if someone says “Alexey, tell me about a project that you've worked on that you're proud of.” “Cool. Here it is.”

39:21

Alexey

**It should be like an elevator pitch for pretty much everything. Right? The story about yourself, a bunch of projects you worked on – you should have a story prepared for that, which ties back to the point. And if they ask for them, explain the details.**

39:37

Luke

Yeah. The STAR methodology, if no one's ever heard of that, it's “Situation Task Action Result”. It's a good thing to work towards, but if you practice enough, you can get to a certain point. It can sometimes feel a bit rigid. If you're like, “Hey, like, this is the situation. This is the task. This was my action.” That's gonna come across a bit manufactured. But if you can stick to that and wrap it into the normal way that you communicate, so that you've done it so many times that it just becomes second nature.

It's a good framework to work towards. But yeah, standardized questions – you know pretty much what they're going to talk to you about and what they're going to ask you. It's going to be a get-to-know, there's going to be some standard questions. Get some good examples, work on them, have them, so they’re on demand, ready to go, and you come across really articulate. I think you don't want to get called out on, “Hey, man. Tell me about you.” And you just freeze.

40:32

Alexey

**I mean, I might if I don't practice. I would say the last time I had an interview was three or four years ago. I might get stuck and then start talking about my historical childhood. Probably not what they’re looking for.**

40:49

Luke

Exactly, man. So the intro, for me, is one thing. Obviously, this is about technical interviewing.

40:59

Alexey

**I noticed that I cannot access Slido. So if any of you are asking questions, Slido just won't load. Please put them in the live chat and I will be able to see them from the live chat. I don’t know what happened to Slido, but I imagined that 43 people on this stream right now probably have a few questions. I unfortunately cannot access them, so please put them in the live chat. We can maybe move on to the technical part.**

41:32

Luke

Sure. Where should we start?

# Preparing for the technical part of the interview

41:35

Alexey

**What is it? What do we usually have in the technical part? Is it coding? Theory questions? What else?**

41:48

Luke

I think probably, there's mainly three, maybe four key things in the technical part. Number one: binary questions. “What's the answer to this? What is the correct answer to this?” Number two, “What would you do?” Or “what if” situations. So that’s “What happens if this happens? How would you deal with that?” Example based questions like “Tell me about a time that you did this.”

Then lastly, coding: challenges, coding tasks and stuff like that. That's typically what's in the technical interview. Again, this is why we need to be fairly generic here – most companies or all companies are quite different from how they run their interviews. This isn't the blueprint of how it works, but generally, there'll be some kind of technical session in the middle. How companies frame that is different from business.

42:54

Alexey

**What are typical questions that you see? Of course, companies are different. If you interview with 100 companies, you will probably get 100 independent questions. But some of these questions will probably be similar. Like in an interview for data scientists, we will see some that come up pretty often. What kind of questions are they usually? Theory of coding, maybe?**

43:22

Luke

Yeah, I'm with you. It's very closely aligned to those four types of things. Again, all companies (and this is part of the prep) will have different expectations in what they're going to speak to you about. For me, I would never prepare for specific questions – I would practice questions in case they come up. But when it comes to preparation for technical interviews, what we need to do is really try to understand the expectations of the individual customers that we're trying to work with – the individual companies that we're trying to join.

The questions – I mean, I can tell you some, but they're not going to be relevant for everyone else. But what is relevant is setting the expectations or trying to understand the expectations of the clients that you're interviewing with. Again, if you had someone on the inside or HR talent person that you're working with, or a recruiter – when you get to a technical interview, the first thing that you should be asking is, “What are the expectations of this interview?”

You should never ever, in my opinion, go into an interview and say “It's a technical interview.” And that's all you know. That is blasphemy in my world. [chuckles] Every single time you go into any interview, you should really understand, at least from an agenda perspective, the context of what you're going into and speaking about. You need something to base your prep off of. Number one is… [cross-talk]

# Establishing the hiring company’s expectations

44:56

Alexey

**So you do this before – let's say I am working with you, I passed the introduction stage, and now you have a technical interview with somebody like a senior data scientist. So what do I do? Do I ask you or do I ask that person, “What are your expectations?” in an email before the interview so I know what to expect? Is that what you're saying?**

45:24

Luke

Yeah. Let's say you got through the intro stage and that all went really well. You say “I'm really keen to continue. What's the next stage? And what are the expectations? We're in that technical stage, I should be able to give you a very strong or at least some pointers in terms of what they're going to be looking for within that technical stage. That's kind of the baseline for your preparation. What we don't want to do is go really broad, really generic, and not really know what goal we're shooting at. Yes, there are some really good sites out there – we can go and practice coding questions and LeetCode and HackerRank and Codeforces and stuff like that.

But generally, I think when we are prepping for an organization, we want to keep it as focused towards emphasis as we possibly can, which links back onto – I would only recommend that you do this, if this is like the role that you actually want and this is the company that you actually want, because it takes time. You need to look at the organizations and firstly, you want to ask the question, because that's going to give you a good baseline to work on. But then secondly, you want to start looking at the individual job specs and roles that you're applying for and interviewing for, and start to work out the levels of essential vs secondary vs ideal skills. That's going to give you the prep, and that's going to give you the direction of how much time you put on the prep.

For me, I'd much rather the candidates that I work with spend a ton of time focused on really getting up to scratch on the core essentials of the role, spending 20% of their prep time on secondary skills, and then if we've got any time leftover throughout that prep stage, work out what else is ideal – other things that might be really beneficial to the role but aren't essential or secondary. The questions for me are important because with the customers I've worked with, I do know some of the specific questions that they would ask. But I don't share them with candidates, because then it will become unfair. Like if I said, “This is exactly what they're going to ask you,” then that's not fair, right? [Alexey agrees] So I'll give people pointers about the areas of what's going to get spoken about and then I'll set the expectations for how much they should know, or how much they should be able to articulate themselves within those particular things.

48:01

Alexey

**Do you mean how deep into the theory they should go or just cover the basic concepts like “We don't need to go too deep.” Things like that, right?**

# Depth vs breadth

48:10

Luke

Yeah, for sure. I always think it's like – if you imagine three circles of depth, the first point is fairly basic, everyone should understand points about this. I would never skip over those points, because candidates sometimes when you think that you know, but if you've not been asked to articulate for a while, the fundamentals are always really important. So I never say skip over the basic questions and the basic knowledge because I think that if you get asked a question that's fairly simple, and something that you probably do on a day-to-day basis, but you don't know how to articulate that in a really fluid way, how they read that is “Do you actually know this?” [cross-talk]

49:00

Alexey

**It's like you know the answer but then you start rambling without really answering, right?**

49:05

Luke

Yeah. To give you an example, one of the questions that catches loads of candidates out from one of the clients that I work with, is “What do generators and decorators do?” Tons of people use them and they know them, but to articulate what they do – some people get really caught up on that. Then they look at that candidate and think “Didn't really know it. Didn't really explain himself or herself very well on that particular point.” And then it's obviously a red flag, but a cross next to your name in terms of one of the particular things.

I always say definitely think about the fundamentals so you don't get caught up on anything that you know, that you could easily work with, but just for some reason – interview nerves, being pressured in an interview, whatever – you just, you screwed that part up. Anyway, first circle – essential things, real high priority, and the fundamentals. Secondary – how do we level that up now? What's the more difficult version of this? And if I was interviewing you, “What would my question be that's going to be a follow up question to what I've just answered? How do we make that question I've just answered correctly 10 times harder? What’s the natural follow up stage there?”

50:23

Alexey

**That's what I do, usually. I don’t have a list of questions I asked, I just say “Tell me about the project you worked on.” Then the person tells me about the project and they say, “Okay, I used this model (random forest, for example).” And then I turn to them and say “Tell me about how random forest works.” And then I start digging – every time you say something, I try to pull up. [Luke agrees] I guess some people have different skill sets. Some people just get those questions and then they maybe don't dig deeper, but want to check the breadth of your knowledge. Right?**

51:00

Luke

Yeah. But then if that is the case, we should know that. Right? If someone's going in for a “breadth interview”, where they want to see how much you know in cloud, and X, and Y, and Z, and all of these areas, then that's what we should be prepping for. But we can't do that if we don't know the expectations from the business or from the recruiter or from the internal talent person.

I always think that all businesses should not give people the answers and not give people so much information that they can kind of walk through the interview process easily. Because it does need to be, in my opinion, tough and we need to work out that people can actually do it and they can think for themselves and all that sort of stuff. But you can't set people up to fail. You can't be like “Turn up for a technical interview and we'll see how you go.” That, for me, is bullshit. I think we definitely need to at least have context about what's going to get spoken about and then you can prep for it. But then it still follows the same principle in my eyes. “What's the follow up question to this particular thing? What kind of flowchart would I ask candidates?” Or “What would I ask myself if I was interviewing that will make this difficult?”

That gives you a lot more of a free flowing prep, rather than being like, “I think they're going to talk about this. I think they're going to talk about that.” Realistically, if we're talking about this particular subject, most companies interview in the same sort of way as you do. So let's talk about this particular question and see how they answer it, and then stem from that particular answer. If I was a machine learning engineer or a data scientist, this is how I would prepare. I'd be like, “Right. Let's start on something that we definitely know is gonna get spoken about. Outside of that. How do we work around that and build more breadth, but also depth within that particular thing?” [chuckles]

# Overly theoretical and mathematical questions in interviews

52:58

Alexey

**I'm just thinking, “How do I stop you?” [laughs] [cross-talk] It’s fine. I’m joking. I see that we have three questions. Maybe it's time we actually covered them. The first question is “What do you think of companies that mainly ask very theoretical questions? As in, data scientists should all know mathematical and statistical formulas.”**

53:22

Luke

I think it's if it's relevant for that business, then it's valid. But I think…

53:30

Alexey

**How often is it relevant? Sometimes I feel like people don't know what to ask at the interview – they just Google a list of questions and this list is theoretical. So they just fire off these questions.**

53:41

Luke

Yeah. If it's completely abstract, “These are our interview questions for no other reason, apart from these are *kind* of the right things that you would ask in an interview for a data scientist.” Then no, that's bullshit. All of the interviews, in my opinion, should work backwards from the job responsibilities and what they're going to do on a day-to-day basis. If that's something that they're never going to touch or don't need to know, then why ask it? What's the point?

54:09

Alexey

**Because you studied this at university, and you feel like everyone should also know the answers to these questions?**

54:17

Luke

Yeah. I've heard that before from clients I've worked with. But how much impact does that have on a candidate's ability to do the job right now if they can recall something that they’ve learned 6, 7, 8, 9 years ago of a very specific thing? What impact is that going to have on if they can do that right now? I guess the flip side to that is – no, I don't think there’s a flip side, actually. I think they’re bullshit. [chuckles]

# Bombing (failing) in the middle of an interview

54:54

Alexey

**How do you keep going with an interview if you've flopped in between and feel uncomfortable? What does “flopped” mean? It’s like if you’ve failed?**

55:05

Luke

If they've just bombed it.

55:08

Alexey

**“Bombed” means if you failed, right?**

55:10

Luke

If you fucked up.

55:13

Alexey

**Now it’s an 18+ podcast.**

55:17

Luke

Sorry, man. [laughs] I guess it depends. Sorry, I know it's a really awful answer. But I guess it depends on how you’ve bombed and how that feels in the scenario. It'd be good if they could give me a little bit more of a specific but… and it depends if you really want that job. If I've bombed (and I’ve bombed in an interview before, absolutely [laughs]) but I really wanted to work there. It didn't work out in the end, but I've got nothing to lose at this stage, right?

So if you bombed in an interview and you think “I can do better than that. That was just a really bad day for me.” I'd tell them. I would go back. And I've had multiple people that I've worked with, who have bombed interviews and I've said, “Look, take four weeks. We're going to prep on these particular things that you absolutely bombed on. And then we're going to retake that interview with that client.” And people have got jobs from that.

56:17

Alexey

**Ah. That’s cool. So it happens.**

56:21

Luke

Yeah. 100%.

56:23

Alexey

**For me, when I bomb something – when I fail something – then I just think, “Okay, I should have answered it this way.” And then I do some research and understand, “Okay, this is what the answer should be.” And then they just don't do anything else – the next time this question comes up, maybe I’ll answer it better, but that's it. But what you’re saying is, instead of just working through this and thinking of a better answer, you reach out to the company and say, “Look, I had a bad day. I did a bit of thinking and I want to retake it.” Some companies actually agree to the interview four weeks later?**

57:04

Luke

And then they take those people in the end, yeah. There are three examples I've got in my mind right now of people that have done that over the past year with me. But anyway, if you've bombed an interview, this all depends on if you really want it. If you *really* want it, then what have you got to lose? You should definitely go for it. But if you’ve bombed an interview and you think, “Oh, this is not for me anyway.” I would just wrap that interview up really quickly and then just get out of there.

But if you think “I’ve bombed that and I want it.” It’s exactly how you said – I would message the person that's just interviewed me and I would be like, “Alexey, I’ve absolutely bombed that interview and that was awful. I can 100% do better than that. Would you just do me a favor and give me three to four weeks? Let me come back and retake that. Can we do that?” Most people would say “Yeah.”

57:57

Alexey

**I'm just wondering what I would do if I received a request like that – what a recruiter would tell me to do. I've never received a request like that. So anyone that's listening to this interview right now and then will have an interview with me, and hopefully you don't, but in case it happens.**

58:22

Luke

Just one more thing on that. The risk there is that, if you do that and then you bomb again.

58:28

Alexey

**Oh, yeah. [chuckles] Oops.**

58:30

Luke

I've had that and it is heartbreaking to be like, “Sorry, man. You still weren't good enough.” That's the risk that you take. But if you really want the thing that you're going after, I would take that risk. Every day.

# Applying to different roles within the same company

58:47

Alexey

**A question from Alvin. “Is it okay to apply to different roles in the same company within a short amount of time?”**

58:57

Luke

If it's relevant, yeah. But I wouldn't pepper gun the company and apply for everything. There are some people that would look at that and think, “Oh, that's a bad sign.” I don't really see it as a bad sign. I just think it's a bit lazy to be like “Apply all” or “click, click, click, click, click,” because I've seen people that have applied for work-student jobs and then senior and principal engineers. You're not looking at what you're doing, right? I don't think it's a bad thing, but just make sure it's super relevant and just keep it focused towards what you actually want to do.

But I think we spoke about this last time – I think the best thing you can do is actually just reach out to the right people and speak to them directly, otherwise, you just get put into a black hole of 10,000 other applications and you’ll probably never be contacted. For me, the standing out part is about being different and doing something differently. I would personally just reach out to the people and say “This is what I want to do and this is the impact I can have with you guys. These are the roles I'm thinking about. What should I apply for and where should I go?”

# Luke’s resource recommendations

60:05

Alexey

**Yeah, I can add to that. I also see nothing wrong with that. We sometimes have positions that look similar, but they're from different teams. Talk to the recruiter on the first interview and say, “Yeah, I applied to other positions, too.” We should be wrapping up. So the last thing I want to ask you is if you have any book or other resource recommendations that you can give to the listeners.**

60:36

Luke

Yeah. Regarding this document, I’ll tell you all now: LeetCode, HackerRank, Codeforces, AlgoMonster, Educative ( I don’t know if you've ever heard them before). Really, all of that – if you want to practice just questions and interview questions, and engineering questions, and science questions – they're really, really good. I know there's a lot of controversy about LeetCode questions and all of this sort of stuff, but companies run interviews like that. So if you want to practice, those are really good places to start.

But then equally, as I said, this document that I'm putting together about interview prep – I'm really sorry we didn't get to really dive into a lot of topics today. This document, I'm going to work on it, and I'm going to expand on it. If anyone wants it, reach out to me on LinkedIn and give me a couple of days to make it look like it's not been written by a five year old, and then I'll happily share that with everyone.

61:33

Alexey

**It’s kind of your thoughts, right?**

61:37

Luke

Yeah. [laughs] Potentially.

61:43

Alexey

**Is there any chance we could do that in the show notes? It will be released in a couple of weeks.**

61:52

Luke

Sure. As I said, just give me a couple of days and I’ll jazz that up. We’ll add that in.

# Conclusion

61:57

Alexey

**Okay, it's always a pleasure talking with you. Second time was fun. Maybe we should have a couple of beers and do a third one.**

62:05

Luke

Yeah. I'll see you in two years, man. [laughs]

62:10

Alexey

**Maybe earlier [chuckles] Thanks for joining us. Thanks, everyone, for joining us, too. Thanks for the questions. I hope you enjoyed it. Have a great weekend!**