



SDS PODCAST

EPISODE 127

WITH

EVA MURRAY



Kirill: This is episode number 127 with Head of Business Intelligence at Exasol Eva Murray.

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Welcome to the SuperDataScience podcast. My name is Kirill Eremenko, data science coach and lifestyle entrepreneur. And each week we bring you inspiring people and ideas to help you build your successful career in data science. Thanks for being here today and now let's make the complex simple.

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Welcome to the SuperDataScience podcast, ladies and gentlemen. I just got off the call with Eva Murray, who is the Head of Business Intelligence and the Tableau Evangelist at Exasol. We had a great chat about Eva's career and the different places it's taken her, where she's worked, you will see how she's travelled the world, and very importantly, how she broke into the space of data science from a completely non-technical background. Eva studied Commerce and Psychology at university, and yet now she is completely rocking it in the space of data science and visualisation and business intelligence.

And also, we talked about Eva's project, the project that she is running with Andy Kriebel, who you might know from the podcast. He was on the show a couple of months ago. And the project is called Makeover Monday. It's a visualisation project where they take datasets and redo the visualisations to make them look fantastic.



So a very, very interesting podcast, very inspiring to get up and take action and change your career. You'll find a lot of interesting tips and philosophies that Eva follows in her own career, how she pursues opportunities, and how she doesn't accept the status quo, she doesn't settle for anything less than what she is passionate about. So without further ado, I bring to you Eva Murray, the Head of Business Intelligence at Exasol.

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Welcome ladies and gentlemen to the SuperDataScience podcast, today I've got a special guest, Eva Murray calling in from Germany. Eva, how are you going today?

Eva: I'm very well. Hey Kirill, how are you?

Kirill: I'm well as well, thank you. And tell us which city are you calling from?

Eva: I'm calling from Nuremberg, which is in Bavaria, really in the heart of Bavaria. It's just about an hour north of Munich.

Kirill: An hour of north of Munich. So Bavaria, Bavaria is where the pretzels are, right?

Eva: Yes! And we have amazing pretzels. They're so good, I'm quite addicted.

Kirill: Yeah, that's awesome. And how's the weather right now in Nuremberg?

Eva: Well, I can't even see it. Because it's still dark outside. But it's about 5 degrees and raining. So quite unpleasant. I think it's going to rain pretty much all day and most of the week. But the weekend looks to be sunny.

- Kirill: Oh wow. Wait, I didn't even realise this. What time is it over there?
- Eva: It's quarter past seven in the morning.
- Kirill: Oh wow. Thank you for waking up so early! I didn't even realise it. Because in Brisbane, in Australia right now, it's 4 pm. So yeah, thank you for taking the time.
- Eva: Yeah, that's fine, no problem.
- Kirill: That is awesome. Everybody listening to the podcast, it was interesting when we started chatting and I was trying to understand where Eva's accent is from. Because to me, and Eva confirmed this, to a lot of people, she sounds South African. But it's completely not. So Eva, tell us a bit about your background, like how have you moved around the world?
- Eva: I never thought I would move around so much. But when I finished high school, so this is going back a while, in 2004, I went to New Zealand.
- Kirill: In Germany?
- Eva: In Germany, yes, sorry. Because I grew up here, an hour north of Nuremberg, in a town called Bamberg, which is very, very beautiful. So that's where I grew up and went to school, and then I left to go to New Zealand to do work and travel, and I planned to be there for about 3 months, and then ended up staying for 8 and a half years. I studied in New Zealand and worked there, and then from New Zealand I moved to Australia for 3 years, and then back to Germany to be closer to my family. So I was away for 11 and a half

years, and I moved back – well now it's 2 years ago, so 2016 in the summer.

Kirill: Ok, gotcha. That's a very interesting combination, the German plus New Zealand mixed South African accent. But how's your German? Did you develop an accent in German itself? When you speak to native German speakers now, can they sense that you've been abroad for so long?

Eva: Some people can, and I think it's people who have been abroad themselves, and who maybe lived in an English-speaking country, because they pick up. It's word choices, it's a little bit the melody, and just the way I speak, which is probably a bit more excited than Germans usually would speak. And that's not a criticism of them, it's just we're very much straight to the point, and there isn't too much emotion in our language, and it's just the way we work, and that's just the nature of the language as well. Whereas in English, if you think of this movie, "Julie and Julia", there's this scene with Meryl Streep where the sisters meet at the train station. And they go crazy, and they shriek, and they're so excited. This doesn't really happen in Germany. People are still excited, they just don't express it so openly. And I think I still do, and then in German I kind of subdue it, but people can definitely notice that I have it elsewhere, especially when I try to say – when you use idioms, and you just get them slightly wrong because they might be similar in both languages, but I use the English version, and I just translate it into German. And I find that most of my friends, and also work, I mostly speak English still, even though I live in Germany. So English still feels like my main language. And I

feel it's easier to express myself in English than it is in German.

Kirill: Very interesting. I actually have a theory that the amount of expression in a language is proportionate to the average temperature in a country, or I would say how cold it gets in the country where the language comes from. Because Russia, very similar. People don't tend to be over expressive. Whereas I know quite a few people from Colombia and from South America, and Spanish-speaking countries, very, very expressive in all their emotions. I think it's very interesting. Would you agree to that, or do you have a different theory?

Eva: I think you could be on to something there because Australia is a very laidback country, but the weather generally is warm and even in winter you have a lot of—well, I lived in Sydney—a lot of sunny days. There's this general just aliveness in people's mood and they just seem to be—I don't know if they're happier, but they just seem to be more relaxed and maybe going about things in an easier way. I think the one thing that might be an exception, and people might correct me here, but in the UK I think it also has something to do with the language itself because in English there are all these words people use like 'amazing,' 'awesome,' 'great,' 'outstanding.' If I were to use these words in German, it has to be seriously spectacular. You know, it's not just "Oh, this pasta sauce is amazing!" It's like, Germans don't say pasta is amazing. It just isn't. It's good. And if someone said, "This is really good," that is a really good compliment, you know. No one should be offended by that. But in English people will be like, "Oh, so you don't like it?"

Kirill: Very interesting. There we go. That's like a little excursion into cultures. So for anybody who hasn't been to Germany, if you ever go, then expect that. And don't think that people don't like your pasta if they don't say it's amazing. Really cool. Thank you for sharing. But let's go to you, to your career. Guys listening to the podcast, Eva is doing some very interesting work in the space of data science and she's a major contributor to just the field in general through her involvement in the project which is called Makeover Monday, it's a visualization and business intelligence project where they take visualizations and they redo them, like older or poorly done visualizations and they redo them to make them look amazing using newer tools, but not complex tools, not sophisticated tools, mostly Tableau. And then the other area where you work in data science is the company that you work for – I hope I'm pronouncing this right – EXASOL. So, I would like to talk about both of those areas and of course, your background, how you got into it.

Maybe let's start with your career path. Let's talk about what you studied and then how you moved on, because you worked in many different areas including consulting and tutoring and banking and so on. So it will be very interesting to see how your journey unfolded. What do you say?

Eva: Sure. It sounds good. And I'm glad you told me where to start because I'm like, "Where do I actually start?" Yeah, so I studied in Wellington in New Zealand. I got my permanent residency, which meant I could actually afford to study, because student visas are quite outrageous if you are international student. So I'm sitting there and I'm thinking, "What am I going to study?" I knew I wanted to study some

sort of commerce degree, because I've always been interested since high school in economics and law and that kind of stuff. So I thought, "Okay, I'll go for commerce degree, but I have to differentiate myself from others, I can't just study commerce, because there will be so many business students and I need to do something else."

And they had this option to study a conjoint degree of a Bachelor in Commerce and a Bachelor in Science. And I thought that sounds really cool, because a science degree sounds really smart. But I never did really well in physics, chemistry and maths in school because I thought it was just me not getting it, but because I had a private tutor in maths, I realized maybe the way the teacher explained it didn't quite work, because as soon as I started working with a private tutor, my marks really improved. So I thought, "I really want a science degree, but I'm not going to study maths or physics or chemistry. So what can I choose?"

And the one that was kind of least science-y from that perspective in the list was psychology. And I had, when I left Germany, or before I started studying, I thought for a brief moment about going to med school. I actually applied in Germany and I got a spot, but I didn't take it. So my dad is a doctor, my uncle is a doctor, my grandpa was a doctor, and I thought I kind of have to keep it in the family, but doing psychology felt like because my dad is a psychiatrist, which is a medical degree, but kind of looking at mental issues as well – so I thought I'll at least keep it in the family somehow.

So, okay, I signed up for commerce and psychology, and I studied that and I loved it. In commerce, I did commercial

law, accounting and HR, and then I had my psychology degree. And I have to admit, accounting is not my thing. I really didn't enjoy it. I kept telling myself this is great so I would kind of get through it, and not wake up every day thinking, "Oh, my God, I'm dreading it." So I'm trying to just trick myself into enjoying it. I didn't really enjoy it. It just didn't gel with me. But at the time, because I started studying in 2006, and when I finished, in 2010, the global financial crisis was right in between, and I thought at least with an accounting degree I might be able to get a job somehow.

Thankfully, because of accounting, I found out about the Big Four, so the big four consulting companies including Deloitte. That's where I started after I finished university, which I guess in the U.S. they call college.

Kirill: Yeah.

Eva: So, once I completed my degree, I joined Deloitte as a graduate. So, I applied with Deloitte and I applied to join their HR consulting practice, it's called human capital, because of my psychology background. They ended up putting me into IT consulting, which is really the opposite end of the spectrum. I was a bit scared at first and I thought, "Well, I don't have an IT background. How am I going to do this?" But at the same time I thought, "They're pretty good at what they do. I'm sure they have a plan. So I'll just trust them and see where it takes me." And then I stayed with Deloitte for a little over two years.

Kirill: So just to get this right, you applied with Deloitte for accounting, but they put you into IT consulting?

Eva: No, sorry, I applied for HR consulting, but I just kind of went to the people side of the spectrum and I ended up on the IT side, which in hindsight was really good for my career, but also personally I would rather work on IT's project than on things like restructuring and layoffs, because a lot of those reorganizations, change management, it's all a lot more emotional than IT. And the way I always looked at it was, my colleagues in HR consulting, they have to deal with these projects that change organizations in a way that people will be reluctant to do or they might lose their jobs; whereas in IT, I'm going in there and I'm helping them set up new systems to make their lives easier. So usually they welcome you with open arms or at least with not so much resistance, so I felt that makes for a nicer day at work.

Kirill: Yeah, gotcha. It's like working, for instance, at a credit collection agency. Somebody has to do that job, and I totally respect people who do that, but at the same time you're always dealing with unhappy people, with people who are angry at you for no reason. They should be angry at themselves, or angry at the circumstances, not at the person that's going up to make sure they pay their bills on time.

But it does take an emotional toll on you when you're doing roles like that. So, yeah, I totally agree. But I also like the story because mine went very similar. I applied to Deloitte to do accounting, but they put me into forensics, absolutely different, even different floor in the building, and then in the forensics department the partner was like, "No, you should be in data science, which is linked to forensics."

So, yeah, from our examples it seems to be a thing they do at Deloitte where they really don't care where you apply. Either they do it by accident or they do it on purpose, they put you in other places. It's funny like that.

Eva: Yeah. So I heard that depending on who interviews—so, during the process where there's assessments, et cetera, then there was a partner interview. And it depends a little bit on who interviews you, what team you go into, and I became part of the team of this partner and I just connected with him really well. There was this instant—you know, we just liked each other, we got on well, and I think that probably just made up his mind, you know, "This is where she should go." And I had a great time. It was really fun and I learned a lot. There was a steep learning curve, but if you're like a sponge and you take everything in, you get so much out of it.

Kirill: Okay. And looking at your career now, I know you were doing BI or data science at Deloitte at this stage—because I find consulting is such a different area as opposed to industry, and I'm always interested to know what a person who worked in consulting learned and took away. What would you say is your biggest takeaway from spending two years at Deloitte? Maybe it's an interpersonal skill, maybe it's a time management skill, or maybe it's a technical skill. What would you say is your biggest takeaway that helps you in your role as a data scientist now?

Eva: I would say the biggest takeaway is to work fast and still be thorough. Going into Deloitte, I was already a pretty organized person. I was pretty good with time management.

Kirill: Yes, of course, because you're from Germany. You have a head start.

Eva: Exactly. It's in my DNA. (Laughs) No, all jokes aside, I went there, so I didn't struggle to fit in the workload, but what I learned was to work really quickly and to still pay attention to detail because what I was very conscious of is, you have these charge-out rates, and it's not that someone actually needs to say this. It's just this implicit knowledge that you're aware that everyone above you is more expensive for the client. And I still to this day think about this all the time.

When I deliver work and someone else has to review it, whether their time is more expensive or not, I try to do everything I possibly can to make this a complete piece of work and very well-reviewed and thought through before I hand it over, because the worst is if someone like a senior manager has to fix your typos and their charge-out rate might be two or three times as much as yours. They should not be spending time on this. They should be spending time maybe looking at the logic of your argument or the content, have we missed something, is this strategic enough, et cetera. So, from that perspective, I think working fast and being thorough and getting really good at PowerPoint, those were the skills I took away and that was pretty good.

Kirill: That's really cool. I can relate to the PowerPoint one. Actually, I can relate to both of them. It sounds like an impossible feat to be at the same time fast and thorough. Usually people consider it as you're good at one, you pay attention to detail, but you have to be slow; or you're fast,

but then you're going to miss a lot of detail. What's the trick? How do you accomplish both at the same time?

Eva: I would say it's about focus and finding, "Okay, this is what I have to do. I'm going to not distract myself by looking at my phone, checking the news, eating something. For the next two hours, this is what I'm going to work on." And probably also ahead of time, so maybe when you talk through with your manager or your colleagues what the deliverable is, to make it very clear who is responsible for what so that you're not second-guessing yourself or having to think, "Oh, what if I include this as well or this as well?"

Yeah, being able to focus and say, for example, "These are the five slides I need to create to give an overview of the problem and to dive into detail around one component, and then I'm going to come to my conclusion and then really nail in that one." And I'm very pedantic when it comes to formatting, that's when PowerPoint thing comes in. I actually read at some point that the human eye can detect whether something is off by one pixel. So that's where I mean attention to detail. Things need to be spot-on every time.

Kirill: Yeah, definitely. You can tell that story to our designer because I definitely have that. My eye can detect things that are off by one pixel. It really throws them off when they deliver a picture and there's like one pixel wrong. It really gets to me. But yeah, gotcha. Okay, and then what happened? After two years at Deloitte New Zealand, you made your way to the motherland, Australia. (Laughs) No offense to anybody in New Zealand. It just sounds funny. You went to Australia?

Eva: I did, yeah. So I moved to Sydney and what I wanted to do was find—so this is at the time of my husband at the time. We said we want to find some new opportunities. In New Zealand, we lived in Wellington. Wellington is the capital and the only bigger place in terms of careers would be Auckland, and we didn't really want to live in Auckland. We considered it, but we're like, "Well, it's a little bit more of the same and maybe we'll just make a bigger move to Australia. We get better weather. The income would be better. And also there will just be more job opportunities." Plus, it's a little bit closer to Germany, so I can visit my family. You know, it's easier, more connections and all of that.

So we moved to Sydney and that was pretty much four years ago, so 2013 in April by the time I got there. And I decided that I wanted to join an organization in the industry rather than in consulting, and I looked at banking because I knew there was going to be a lot of opportunities out there and the money wasn't going to be bad. Yes, it's not all about the money, but Australia is an expensive country so you need earn a certain amount if you want to live in Sydney and, of course, at some point in your life you want to save some money and maybe buy property or invest or something.

Kirill: And also, after working as a consultant for two years, I can totally appreciate it. You know, you're putting in hours and hours of work staying up late, you're getting paid very moderate remuneration, and at the same time you're burning out. I can totally understand how you'd be like, "Maybe consulting is not my first choice right now. Maybe I want something more, kind of cruise-y where I can just do what I enjoy without having all that stress all the time.

Eva: Yeah. And I think there's nothing wrong with wanting to earn more money or being paid what you feel you're worth. So from that perspective Australia worked out really well and I found a job really quickly. I had to wait for my visa situation to be cleared up, but as soon as I applied—I applied on a Thursday, while I was still in New Zealand, and then on a Monday I got a call about an interview, and on Tuesday I had the interview, which worked out really well because on a Wednesday I flew to Germany for one last holiday before things got serious. So it worked really quickly.

And that's where management consulting came in and was really beneficial because what my manager told me afterwards was that when he interviewed me, the management consulting part of my CV was really interesting for him because he said, "I want someone with those skills to take the team to the next level." So, of course being at Deloitte opened doors because people can expect a certain level of quality from your work, a certain attitude and work ethic.

Kirill: Exactly. I totally agree with that. After the Big Four, especially one or two years, it's not complex to find a job. Completely agree.

Eva: Yeah.

Kirill: Okay, what did you do at Commonwealth Bank? By the way, guys, Commonwealth Bank is the largest bank in Australia. In Australia we have also, kind of like the Big Four consulting firms worldwide, there's the big four banks in Australia: Commonwealth Bank, NAB, ANZ and Westpac is the last one. So, yeah, there's four banks. Commonwealth

Bank is by far the largest bank—well, you can kind of tell from the name, Commonwealth Bank of Australia. So, what did you do at Commonwealth Bank?

Eva: My intention was to get a business analyst role and I joined a finance team. Because the bank is so large, they are split up into various segments, and our segment was business and private banking. And within that segment there was a finance team. Within that finance team we had an MIS team, so this is kind of pre-analytics or BI, it was called MIS – Management Information Systems. I joined them as a business analyst and I was probably – not just probably, I was the least technical person in that team because everyone else was more of a—you know, they were writing code and more on the programming and SQL side, whereas I came from a management consulting background. And yes, at Deloitte I had at the very end used QlikView, as it was still called at the time, so I had done training on that. But like you mentioned, I didn't really do analytics or BI there, it was more business analyst roles in different projects and sometimes it involved analysis in Excel.

But joining the bank I was then in a team that was a lot more what I wanted to do, looking at data analysis but not having the very heavy techy background, which can be challenging because when you're new in a team and you have a very different skillset from everyone else, it's a bit harder maybe for the team to come together or for them to accept you—maybe accept you is fine, but they might not respect you as much or they might question your role.

But it worked out okay because my first task was to evaluate what BI tool we should be using for this finance team, because at that point it was all analysis done in Excel and then reporting done in PowerPoint for these kind of management meetings. And we wanted to move to something that's more automated and that's interactive, and that's where my data analytics journey really started because the options I was given in terms of tools that were already existing at CBA was, "You can either use Oracle Business Intelligence or OBIEE, or you can use Tableau." And it was very clear very soon that Tableau would be the choice because Oracle BI was just not an option for our team because none of us had the skills to use it and we didn't want to have to train everyone so heavily and Tableau just seemed like a much better option in terms of the business users as well.

Kirill: Okay. Did it take a long time to implement Tableau? Because an organization that big would have a lot of momentum with the old tools. How did you go about that?

Eva: Yeah, good question. At the beginning it was just me using Tableau and creating some reports to test out how would this look, how can we use it, but because we were so stuck in BAU land, it never really took off. So I built a couple of business cases and I talked to the CFO and all these things and we showed it and everyone got excited, but there wasn't really the last push. And I think if one person in one team says that this is what we should be using, maybe that's not enough.



So I'm not quite sure where they're at right now because I know there's a lot of Tableau use in the organization. I'm not sure about this particular department because I left before it got to that point. I'm also not the most patient person and at some point I just realized we're not getting anywhere. I really enjoyed using the product and using Tableau and I enjoyed being part of the community and I thought, "I want a job where I can do this all day every day. I don't want to constantly justify why we should be using it. I just want to use it."

At that point I had decided I wanted to go back to Germany, so I thought, "Okay, I've got 12 months left roughly to make a difference for my career and to find a job where I can just have another go at this Tableau thing." And at that time I went to the Tableau Conference in Melbourne and I met some folks from a company called Tridant. And while they were initially hoping to get us as a customer, Commonwealth Bank, that discussion quickly turned into a job interview and a month later I joined them to be kind of helping them build their Tableau practice because I was so passionate about it, but also to become a Tableau consultant as well as a Tableau trainer. So they sent me through I think five different training courses across the board. I did Tableau Server and Tableau Desktop, Train the Trainer, became a certified trainer for both of them, and went to customers and helped them with their Tableau moments, which was really fun.

Kirill: That's so cool. I really admire that philosophy of no compromise. The whole concept that you left Commonwealth Bank because, as you say, you're a patient person, but they

were taking too long and you didn't see any potential or any future in them adopting Tableau and you being able to do what you want, so in order to do what you want you're like, "You know what? Screw this. I'm going to go find a job where I can do what I'm passionate about." That is very cool and I hope those listening to our podcast can take note of that because ultimately you have one life to live, right? You have to be doing what you love, what you're passionate about, not making compromises. And if your company is not willing to adopt the tools or follow up on their promises or whatever the case may be, there's always other places out there where you can just move on to. So, yeah, that's really cool.

Now I think it's a good point of this podcast to mention what is Tableau. There probably are lots of people listening to our podcast who have never used Tableau or maybe even heard of it. Can you give us a brief description, in maybe ten sentences or so, what Tableau is and what it's used for?

Eva: Sure. Tableau is a data visualization and analytics tool. It's software that you can use to just very quickly and easily visualize data by connecting to different data sources and just throwing the data into some charts and seeing where you can spot some trends and outliers, et cetera. And that was the first time – I had used Qlik in the past, but it wasn't that easy at the time, and then when I moved to start using Tableau I was like, "Wow! This is really easy and I can see something and I can work with this data."

And what makes Tableau unique, in my view, is the community around it and this community that exists online, but also in the real world where people are so passionate.

You know, they have user groups of people who meet in the evening to visualize data and analyse data. It's a very geeky thing, but it's really cool because they all genuinely care and they want to make sure that there's a better understanding of data, that people get it and that they can tell better data stories, because there is so much stuff in the news where things are misconstrued and misrepresented by using data visualizations that it's really important that we change that and help people make sense of data much more easily.

Kirill:

Gotcha. Great description. I was going to add that that Tableau is a drag-and-drop tool, so it's super simple to use. In fact, when people ask me how to start in data science, I often say—it always depends on the person, of course, and the circumstances, and the things that you're interested in and what you're good at and what your background is, I guess. But one of the easiest ways to start into data science is through visualization and specifically through Tableau because Tableau is a super powerful tool which is super easy to use.

It's like you were able to drive a race car, but it was as easy as riding a bicycle or something like that, and you just jump into it and off you go. You can come up with the most amazing insights from the most sophisticated datasets within minutes, and it can really show you the power of data. That type of data science or data analytics, I call it data mining, just exploring data in a visual way rather than going straight to applying algorithms and machine learning or other things like that. Yeah, so Tableau is a great place to start into data science in general.

Eva: Yeah, absolutely.

Kirill: Okay. We'll get back to Tableau and your other passion in a second, but let's just finish up on your career. So you worked at Tridant for a year and then on your LinkedIn I see this entry which is amazing. You were a triathlete, traveller and a Europe explorer for three months. How cool is that? That's awesome. Tell us a little bit about that.

Eva: Yeah. When I left Australia, I decided I need a good break, I want to do a few things before I start my new job. And I had my new job lined up before I left Australia. In February 2016 I signed a contract with EXASOL. I actually met them at the Tableau Conference in Las Vegas two years ago, so 2015, in October. And I was super excited to start, but I said, you know, I just want a little bit of a break. So I made my starting date ten weeks, I think it was, from when I left Australia. And after Australia, we moved to Germany and the first step was, "Let's go on holiday."

We went to France for three weeks and I had signed up for this race called Challenge Roth, which is one of the most popular long-distance triathlons in the world, and it's just around the corner from here, from Nuremberg. And I was doing it as a relay team with a friend, so I was doing the swim and bike, and my friend was doing the run. It's a 3.8 kilometre swim and a 180 kilometre bike, and then a marathon. So to train for this, I went to Southern France.

Kirill: Sorry, sorry. 180 kilometre bike ride?

Eva: Yes. It's a bit long. (Laughs)

Kirill: That's like 10 hours on a bicycle?

Eva: No, it ended up taking me 6 hours 20 minutes.

Kirill: That's crazy.

Eva: Yeah. A big challenge, but I've watched this triathlon when I was 14 and that day I was like, "I really want to do this, but I don't even know how. And I'm too young, blah-blah-blah." And I kind of forgot about triathlon until funnily enough, I worked at Commonwealth Bank and my manager said, "Why don't you do a triathlon?" He had just finished one. And I thought, "Why do I have so much doubt in myself? He had no doubt that I can do it, so why don't I do it?"

And I started getting into triathlon, did a lot of short races, and then this was the first kind of long-distance attempt, but not the running because marathon running and me is just not going to work. So, I went to southern France and I trained for three weeks and it was glorious. I think on average I was on my bike 4-5 hours a day and I loved it because I could eat so much food and when you're in France, eating is what you want to be doing.

So, I came back and I had the race a few weeks later and then I had some birthdays to go to and family to visit. And that's kind of this exploring Europe, traveling around, just racing and training, which I loved, and eating a lot, enjoying German summer. And then in August in 2016, I joined EXASOL at the time as their Tableau Evangelist. That was my role for a year and then, since August 2017, I'm also the Head of BI at EXASOL.

Kirill: Wow! Congratulations. That sounds like very big role there, a big step for you. That's awesome.



Eva: Thank you.

Kirill: That's so cool. Tableau Evangelist – wow, that's an actual title. Tell us a bit more about that. Did they want to implement Tableau or did they already have Tableau? Where did this name come from, evangelist, and what did your role constitute and what does your new role, Head of BI, constitute?

Eva: So when I joined them, this goes back to—well, I met EXASOL at the Tableau Conference in Vegas two years ago and I just got on really well with Aaron, our CEO. So, EXASOL is a database company for analytical databases. It's a software company here from Nuremberg in Germany, that's where they started. At the time, I didn't know what they were doing when I first met them, but then when I was in Germany for a Christmas break and before we had moved over, I sat down with Aaron and I pulled up with him just for a chat and he kind of laid out his vision for me of this role as a Tableau Evangelist and what he wants to do with Tableau because the tools work so well together. So EXASOL is a data source which is lightning fast – being the fastest in-memory database in the world – and then Tableau is the tool to visualize that data.

Because when you have massive data volumes, which we have more and more of these days—we gather more data and then we also bring in additional data sources so you have these massive datasets—and you want to visualize them, but at some point you have to stop working with extracts because it just gets too large and too cumbersome. And with a tool like Tableau, where it's so easy to drag and



drop and to create different visualizations of the data, to understand, to mine your data, to get an idea of trends and outliers, you want to work really quickly because the tool allows you to do so. It allows you to drag and drop and just, like Tableau always say, analyse at the speed of thought. So, as your mind goes, you drag and drop and you bring in things.

What we enable people to do is to do exactly that regardless of how large their data is, because with the engine we've built, there is all this power behind it so you don't get the spinner, you don't have to wait for something to load and refresh. It's just instant because we built a really powerful engine for your analytics.

And the two together, what EXASOL had was this great connection to the tool and on a technical level it all worked really well, but there wasn't yet the connection to the Tableau community. And I had that connection, but I wasn't yet at EXASOL. So I joined them and the role as Tableau evangelist was really to help bring our product to the Tableau community and help more people get access to it.

And this is not just as paying customers, which of course is always a nice thing and we're all in business to make money, but also to just see how can we help the Tableau community and how can they help us improve our product. And one of the first initiatives that I became involved with, that I started with my colleague, was to set up this demo environment where we would load public datasets and we would make them available to the Tableau community so they can play with large data we hosted and we get feedback



that way, we can look at how they're using our database, we get a better understanding of what people do with it, but also people get a chance to play with something they normally don't have access to unless their company buys it.

It's just been really fun and I've enjoyed bringing more of the Tableau community and some of those ideas back to EXASOL, but also being able to take things outward. So, most recently, just before Christmas, we released another one of those datasets. And for anyone who is familiar with the Tableau Conference and Iron Viz Competition, which is basically build a really impressive data visualization within 20 minutes on stage, three people competing and thousands watching you live.

At this most recent competition at the Tableau Conference, they had a dataset by a company called Zillow Group in the U.S., which is a real estate platform, and we've just released that data on our demo environment so that people can access it and build those same visualizations if they're interested. And it's those kinds of things I get involved in, but also, as a Tableau evangelist, I'm about organizing the events. So not from a marketing perspective, but more, "Okay, we'll go to the Tableau Conference. What are we going to do? Who do we want to talk to? What are we going to present?" So I try to use my knowledge of the community to make sure our presence there is sensible and has an impact, but also kind of understanding what people would like, so that we have cool t-shirts or other swag to give away because people love that stuff.

But also, on a customer side, I often speak to customers who use EXASOL and Tableau to look at best practices and how they can get more out of those two tools together. And that's, I think, what I see at the core of my role, getting more out of the combination of EXASOL and Tableau, whether that's for people in the community, general users, customers or our partners as well, and then doing webinars and presentations. So it's a very public role, public speaking, it has so many different aspects to it. I think that's what I love about it, because there is so much variety I never get bored, ever.

Kirill: That's fantastic. And I just want to point out to everyone what a crazy coincidence that you met, at the Tableau Conference, you met somebody who is from your town, from Nuremberg, which is like an hour away from your hometown, and is exactly looking for the skills which you're passionate about, Tableau skills.

Eva: Totally true. And I think you have to put stuff out there. I mean, I went to the conference knowing I would move to Germany. So I was definitely looking for job opportunities, but it's not like I had this in mind. I thought at the time I would go to Germany and I would be a Tableau consultant because that's what I've been doing, I've got the training to be a Tableau trainer and I'll just continue to do that because I'm going to be okay in it. And that was still the plan when I was in Vegas and talking to companies and then this came up and I'm like, "Whoa, I don't know how it's going to work out, but it sounds fascinating and I'm just going to do it because it sounds amazing."



- Kirill: Fantastic. We've mentioned previously on this show, on SuperDataScience podcast, I mentioned that conferences are important, guys. Go out there, find a conference like Tableau Conference, any conference, you never know who you'll meet. Like in Eva's example, she met a person that hired her to do a job that she loved. Amazing, amazing story. And also you mentioned before the podcast that EXASOL is expanding to the U.S. and they might be looking for people to join the team. Tell us a bit more about that. There might be people listening to the show who are interested in opportunities.
- Eva: Yeah, absolutely. So, we have our headquarters in Nuremberg, an office in London, an office in Paris, Berlin and Hannover, but we're going to move to the U.S. this year. We're currently in the planning phase of where's the exact location going to be for physical presence, but also we are always looking for people who are interested and keen and motivated, but also just passionate about data, data science and analytics. So what we probably would be looking for is definitely on the sales side, but also in presales. For those who don't know, that is a technical role to support the sales team and to do things like building proofs of concept and helping customers or potential customers to see what can they do with our product and helping them through this purchasing process because a lot of companies, or most companies, before they make a purchase of systems and tools and technologies, they have to evaluate and as part of that they want to see "What can you do with our data?" So we show them.



So, we have these presales roles, and in general at EXASOL, we are very open to finding the right people and then finding the role that fits them. It's not that we have a list of, you know, these are the roles and you have to fit exactly into them. If someone comes who is passionate and wants to do things and is excited to work for a company where there's a lot of opportunity and you can bring everything you've got and you're going to get a lot out of it, we will have a role that fits.

So, people from a data science background, and ideally with the kind of programming language experience, Python, Java, Lua, those kinds of things, that is gold. And if you're experienced with databases, database design, having a computer science background, but also having a different background and working your way into it. It's not so much about where did you study. It's more what can you do now. And I would definitely encourage people to get in touch with us if they are interested in those opportunities, but also to just kind of watch and follow what happens, because as things become available or as we're moving to the U.S., of course we'll announce that, but definitely if you're in the field and you're excited to work for a company who is perceived to be small but has a big impact with our customers and making a difference in their lives at work, then definitely talk to us.

Kirill: Fantastic. I like how you very cunningly said, "Wait and see what happens. We have some surprises in store for you." So, yeah, guys, it sounds like a really cool opportunity. By the way, I'm assuming you need people skills to work in sales or



presales. Is that correct, like being able to present and communicate with potential customers?

Eva: It definitely helps. And that's where that kind of consulting background comes in as well, or comes in handy. In presales you are going to be in front of customers and you are going to work alongside them on their premises. You know, it might be remote as well, but imagine yourself going to their office and setting up a system, loading some data into it, trying things out, tweaking things and getting them right. So it's definitely not a hidden-away-in-a-cupboard kind of role. It's out there, it's presenting to them and showing them the results, but also maybe facilitating some discussion through video conferencing, etc.

So it definitely helps if you are happy to do that. And if you need some help to improve those skills, that's perfectly fine. I think attitude is very, very important, and then the technical stuff can be taught. But also we have existing customers, we have a number of customers in the U.S., and supporting them. So it might not always be finding new ones, but also supporting existing customers with their deployments and maybe they need some assistance adding connections to something else or doing some upgrades, et cetera. Being there for them will be really cool. And they're spread out across the U.S. So, wherever you are, do follow us and do let us know.

Kirill: Awesome. Thank you for sharing that. Okay, we wrapped up on your career. I'm really glad we went through this. And now in the remainder of this podcast, let's jump to your other passion, your Makeover Monday blog. So tell us about

Makeover Monday, what is it all about and what do you do there?

Eva: Yeah, Makeover Monday is a social data project. What that means is it's all virtual, it's all happening online. I run this project together with Andy Kriebel, he was previously on the podcast, I think it came out in November sometime or maybe December. And what we do is we gather datasets and visualizations from the wild, let's say we find them somewhere online, maybe in the news or newspaper websites, and we publish every week a visualization that we think is in need of a makeover, or sometimes they're really good but we just find the topic fascinating and we want to see what people do with the data.

So we publish a visualization, we publish a dataset, and we encourage the community to improve the existing chart and then to show us what they've done. At the moment, a lot of that conversation happens on Twitter because it's a very easy to use platform, a lot of people are connected, and it's very public, so people can join us very easily. So, we publish this data and it's called Makeover Monday, but we actually start on a Sunday because some people need to do it on the weekend because they don't have time during the week or they can't do it during working hours. So we publish the data on a Sunday and this visualization, and it usually comes with some kind of article, so it might be a BBC or CNN article with a chart in it, and we're like, "Here you go. Create a better data story."

And then people create a visualization, and they can use any tool. Typically, most people currently use Tableau, but that's



because Andy and I are so embedded in the Tableau community so that's kind of our reach. But especially this year, we're encouraging and being very active with other tools as well and saying, "Join us. Let's not have all our individual projects. Let's all come together because we can learn from each other." And I'm fascinated to see how people do things using other tools like Power BI, MicroStrategy, Yellowfin, or even D3, Excel, whatever they want to use. If they want to draw it by hand, that's fine too.

So, people use their tool, they create a visualization and a bit of a data story around it depending on their skills, but also what they're interested in, and then they publish it. They submit a picture on Twitter, and ideally a link to an interactive version. For Tableau, they publish it to Tableau Public, for MicroStrategy they can publish to the gallery, same with Power BI, I think it's called Data Gallery, I believe. So then there's all these visualizations and Andy and I look at every single submission. We can't always provide feedback or even a comment because there are hundreds every week, but we've set up this feedback system where we now run live webinars once a week, and if people include a special hashtag called #MMVizReview, we know that people want feedback.

So during these webinars, we typically do them on a Wednesday at 4:00 P.M. GMT, we go through all of the visualizations that have this hashtag and provide a feedback. So we look at them and it's usually about a couple of minutes per visualization that we have time for, and then we tell people what we think in terms of design, strength of their story or their argument, and what other feedback we

have for them. And then, ideally, and this happens most commonly, people iterate on their work because they want to improve.

People participate in Makeover Monday because it lets them practice doing data analysis and practicing visualizations and storytelling every week on a regular basis with a dataset they're not familiar with. Because we pick something and it's very random – I mean, it could be anything – and work people always kind of use the same data, but this is a chance for them to practice their visualization skills and analysis skills for something fresh and new. And then they iterate and they improve and then the week comes to a close, because it's a weekly project – yes, there is no deadline, but most people do their submissions in the week that we publish because then the new dataset comes out.

We also write a recap blog at the end of the week to kind of summarize what worked well this week and what people might want to think about improving in the future because typically we see a few trends of mistakes that people make, and it's not a problem. We all learn and we get better, and we just want to help teach them. So we do this recap blog and then the next week starts already.

So, it's been a bit of a crazy year for me the last year because just before Christmas 2016, Andy asked me whether I wanted to join him in doing this project after his previous project partner Andy Cotgreave from Tableau decided to not continue. So I've done it for a year now, it's been a lot more work than I expected, but that's because I come up with these ideas and then it introduces more work.

But it's been absolutely fun and it gave us an opportunity to also do a little bit of travelling, go to different places, running these live events where we actually get people in a room and for 90 minutes we get together, we do a little presentation about Makeover Monday and why we think people should participate, and then for 60 minutes people visualize data, and at the end, people who want to, volunteer to present and we see what they've built.

It's really, really cool and it's been really fun and we've gone to various places in Europe. We're probably not going to do as much travel for it this year because we also have day jobs, but it was really, really nice to connect with the online community, meet people in person, and grow this project. And for this year we have a few other fun things planned that we're hopefully going to roll out over time.

Kirill: That's amazing. That is such a great thing. Also, is my understanding correct that it's absolutely free for people to participate in this?

Eva: Absolutely. We don't charge and it's funny because at one of these live events in Germany I met someone and I told him about the webinars we do and we provide and he's like, "Okay, so how much does it cost to do the webinar?" And I'm like, "What do you mean how much does it cost?" "Don't you charge for your time?" No, we just really enjoy doing it. Yes, we do this in our spare time, but we really like it. So it's free, it's completely free. Of course, there are limitations because we don't get paid for it, there's only so much time we can allocate because we also have private lives, but the people who want feedback and clearly indicate that, we try to give



them feedback as much as we can. But also, we're not the authority, we're just the people running the project. We're both very normal human beings and there are so many other knowledgeable people in the community and what we really like is that we have so many now who support us in giving feedback.

That can be on Twitter, but also data.world, which is the new platform we're using to share the data, and we're encouraging people to have conversation there as well about it, because it's a bit more of a data-focused platform rather than Twitter, which is very much about quick messaging. But on data.world we want to invite everyone who participates to discuss there what they did with the data, how they analyse, et cetera. So everyone can give feedback, it's not just us.

Kirill: That's really cool. And how many people do you get on average on the webinar attending?

Eva: On these Viz Review webinars we get between I would say 20 and 50 a week who dial in live and then other people watch it on demand because I'm afraid to say it's not the best time zone for Asia-Pacific because it's 4:00 P.M. GMT, but most of our community is European and U.S.-based, so this is the time that most of those people are live. But we've offered to people from Australia and New Zealand if they want us to do it at a different time at some point, you know, maybe once a month or something, we can do it in the mornings, which will be easier for you guys. We don't necessarily know who is participating, because not everyone publishes—or they might publish, but might not tweet about it. So unless we're



told, we're just going to assume that the 4:00 P.M. timeslot is fine.

Kirill: So it's morning time in the U.S.?

Eva: Yeah. Well, it's about 8:00 A.M. on the West Coast, but for the East Coast it's later in the morning, Europe is in the afternoon. That way we're able to cover most people.

Kirill: Nice. Very nice. And also, a common challenge for data scientists is finding datasets to work with, to practice with. Do you provide the datasets as well on your website?

Eva: We do. Because it's been running now for two years as a proper project, there's 105 datasets now, including this week, that people can use and they can look at the existing visualizations, the originals but also the makeovers. So if you go to makeovermonday.co.uk, under 'data' you'll find all the previous datasets if you want to practice something with different datasets. We actually, I think three or four times now, have used EXASOL as a data source, because that way we can help people do something other than using Excel as a spreadsheet data source, but also why not use a live connection, why not use a massive dataset? So we had anything between I think 105 million records and 700 million records, and it's just a different challenge, and we want people to have those experiences and to diversify their skills.

Kirill: That's so fantastic. Thank you so much. It's always inspiring to see people giving back to the community and inspiring others to take up data science and help them through along the journey. I think it's very admirable and I wish for this story to encourage more people to do that, to start blogs or

to help others out, even just by answering simple questions on how to better understand how to use certain tools and things like that. I think this is a great thing.

Everybody listening, if you're interested in Tableau visualizations, definitely check out makeovermonday.co.uk. But even if you're not into visualization, you can find some great datasets there or you might get into visualization through that website. I had a look just recently and there's some interesting ones. That one with the Christmas trees, I found that was pretty funny.

Eva: Yeah. I'd love to invite more people to join this project, so anyone who is listening who is curious to check it out, regardless of what tool you're using, just join us and show us what you can do because a lot of people, especially in the Tableau community, don't necessarily come from an analytics or data science background. So getting more diversity by having people with a data science background who will look at datasets differently than someone with a business background will be fascinating. We think that every submission is a contribution and it makes a difference to the community.

Kirill: Yeah, I totally agree. And to wrap up this podcast, I wanted to ask you a question that I'm really interested to get your opinion on. You've done lots of different things in the space of BI, data science, analytics, visualization. And you've even done, in different companies, you've done work where you're giving back to the community for free with Makeover Monday and even these meetups that you do. What would you say is your one most favourite thing about being in this

field of data science? What drives you the most? What excites you the most? What's your favourite thing?

Eva:

My favourite thing is that people are smart and passionate, and that's what I found wherever I worked. So when I was working at Tridant, they really genuinely cared about their customer and making them successful and helping them get so much out of their data to drive their businesses. But also now at EXASOL, where I talk to the developers who have created our product and they really genuinely care and they are passionate about whatever it is, whatever component it is they're building for this database and they want the customers to be successful and to have the best tool in their hands.

And then, like I said, most people are really clever, the ones you work with, and they understand data. And if they don't, they want to understand data, but they're just trying to do something really good. And I haven't really met any people who are kind of resigned to their fate. Most people understand that whatever they want to do, they can make it happen because it's in their hands. They're smart, they're well-trained, they're educated and they just make stuff happen. They're curious and they don't just believe stuff that's put in front of them.

You know, these days, when you watch TV, there is so much bad stuff on TV and it's just such low quality that you think, "Really? People believe this stuff?" But people do. I mean, you can kind of tell when you look at certain countries in the world and their presidents, you're like, "How did this happen?" But then my hope is always there are clever people

out there who question everything and who are not just satisfied being served up an answer to something or some idea. They're like, "No, no, I'm going to question this. I'm going to find out for myself. And if this is not right, then I'm going to try to correct it. Or at least I can offer my opinion or my analysis to make this a complete picture and the right picture."

Kirill: Okay, gotcha. That's a great answer. I don't think I've heard that one before, that you love the people that are attracted by this field. It's amazing. I totally agree with that. Thank you so much, Eva, for coming on the show. It's been a pleasure to hear your story and where your journey has taken you. For our listeners who would like to get in touch or follow your career or maybe follow your company to see where everything is going in the space of EXASOL or maybe Makeover Monday, can you share a couple of links and best places to find you and these projects?

Eva: Sure. Of course, you can find me on LinkedIn at Eva Murray. What I would ask is that if people connect on LinkedIn to just send me even just a one-liner saying that maybe they listen to this podcast or something, because I don't mind accepting invitations from people I don't know, but I kind of just want to understand where they're coming from. So, that would be great. Alternatively, you can find me on Twitter, it's @TriMyData, but also same name as the website, so www.trimydata.com is my blog and that's where I post about Makeover Monday and kind of life stuff and career ideas and advice. Yeah, so that's the easiest way. And there's also, of course, if you are interested in those opportunities I mentioned for the U.S., keep an eye out on



the EXASOL website, so it's exasol.com, and that's probably the easiest way to get in touch.

Kirill: Awesome. And of course, guys, don't forget the makeovermonday.co.uk blog.

Eva: Absolutely.

Kirill: Do you guys have a Twitter for Makeover Monday?

Eva: No. We do it from our personal accounts, so it's my account and Andy's account. But the hashtag #MakeoverMonday, you will find data visualizations and that's the easiest way to get across it.

Kirill: Okay, gotcha. Awesome. I have one final question for you. What's a book that you'd like to recommend to our listeners to help them in their careers?

Eva: Okay, good question. I want to make two suggestions. One would be the books by Stephen Few, for example "Show Me the Numbers," which is about designing tables and graphs to enlighten. But also one that isn't out yet, because it's still being written, is a book that Andy and I are going to write about Makeover Monday, but not just about the project, but more so the lessons learned in the community. So this is a project for us for the next six months to work on. We're in discussions with the publishers at the moment and we are writing a book that tells a story of the project, but also a lot of those lessons learned. So this is about analysis skills, design skills, storytelling skills, as well as getting together communities of people to kind teach each other, to learn from each other and to build this data knowledge and

understanding of data in our organizations and our communities.

Kirill: That's so cool. Do you guys have a name for it yet? Have you settled on a name?

Eva: Not fully. I think for now the working title will be "Makeover Monday: The Book," and then we'll figure it out from there.

Kirill: Gotcha. Wow, that's so exciting. That's very cool. Guys, look out for that book. The first one was Stephen Few's "Show Me the Numbers" and other books by Stephen Few. And also Andy Kriebel and Eva Murray. Whenever it's published, make sure to get your hands on it. It sounds like it's going to be something super exciting. I'll definitely get a copy, yeah. So, I guess follow Eva on Twitter and you'll know when it's published.

Eva: Definitely, yes. We'll let you know.

Kirill: Awesome. Okay, thank you so much, Eva, for coming on the show. It was a great chat and I'm sure a lot of people got a lot of value out of this. Yeah, it's amazing to hear your story and please continue doing what you're doing and sharing with the community. I'm 100% certain there are so many people whose lives you already changed with that work. Thank you so much.

Eva: Thank you for having me. It was a pleasure.

Kirill: All right, there we have it. That was Eva Murray, the Head of Business Intelligence and Tableau Evangelist at EXASOL, and also the co-creator and co-author at makeovermonday.co.uk. I hope you enjoyed this podcast. There were definitely lots and lots of insights here. What was



my personal best takeaway from here? Very, very interesting. I got a couple that I wrote down as we were going. I'll probably mention the top two.

One was the fearlessness. I love the whole notion that Eva didn't have that much technical background going into the job at Commonwealth Bank, and yet she stood up to the challenge and took on this career shift into the space of data science. Of course, there were some things that were outside her comfort zone, she was getting into a team where there were lots of technical people who knew a lot about data science already, and she was just starting into that space and yet, she did that and was completely fearless and stood up to the challenge and made it happen, made it all happen at Commonwealth Bank where she was introducing, implementing things in Tableau.

Also, the other thing that I really liked, in addition of course to everything else that we mentioned, including the contribution back to the community, but the one thing I liked quite a lot was the 'no compromise' philosophy. When Eva realized that at that time she could not see an opportunity to apply her skills or pursue her passion of exploring Tableau at Commonwealth Bank, she just left that job and she got a new job. It's as simple as that. If you're not able to do what you're passionate about at your job, then maybe it's time to consider what else is out there, where else can you go to find what you're passionate about, to pursue what you're passionate about.

There are so many opportunities now and, as we also discussed in this podcast, good employers, those that you



want to be with, they're not just hiring people for their skills, they're hiring people for their passion. And if you have a passion for something, then there is somebody out there who has an opportunity for you in order to be able to pursue that passion.

So there you go, that is a very powerful philosophy that Eva follows. And if you just put that in the default of everything you do, as the foundation of everything you do, then you're just going to always only do things that you're passionate about. How cool is that?

There we go. That was Eva Murray. Make sure to follow Eva on LinkedIn and Twitter. You can find all of the links mentioned – there were quite a lot of links mentioned on this podcast – you can find them at www.superdatascience.com/127. There you can also find the transcript for this episode and any other resources we talked about. Yeah, hit up Eva, follow EXASOL, see what's happening, they're coming to the U.S. If you're open to new opportunities, this might be something that you could be interested in.

And on that note, thank you so much for being here today and sharing this hour with us. If you enjoyed this episode and would like to hear more conversations like this about data science, then make sure to subscribe to the show. You can do it on iTunes, Stitcher Radio, TuneIn, and any other platform where you might be listening to this episode right now. And I look forward to seeing you back here next time. Until then, happy analysing.