Data Mesh Radio Episode #160: Empathetic Upskilling and Data Literacy - Get Your Data Bootcamp Going
Interview with Alex Bross
Listen (link)

0:00:00 Scott Hirleman
The following is a message from George Trujillo, a data strategist at DataStax. As a reminder, DataStax is the only financial sponsor of Data Mesh Radio, in the Data Mesh Learning Community at this time. I work with George and I would highly recommend speaking with him, it's always a fun conversation.

0:00:18 George Trujillo
One of the key value propositions of a Data Mesh is empowering lines of business to innovate with data. So it's been really exciting for me personally, to see Data Mesh in practice and how it's maturing. This is a significant organizational transformation, so it must be well understood. Empowering developers, analysts, and data scientists with downstream data has been part of my personal data journey that reemphasized the importance of reducing complexity in real-time data ecosystems, and the criticality of picking the right real time data technology stack. I'm always open and welcome the opportunity to share experiences and ideas around executing a Data Mesh strategy. Feel free to email or connect with me on LinkedIn if you'd like to talk about real time data ecosystems, data management strategies, or Data Mesh. My contact information can be found in the notes below. Thank you.
LinkedIn: https://www.linkedin.com/in/georgetrujillo/
Email: george.trujillo@datastax.com.

0:01:11 Scott Hirleman
A written transcript of this episode is provided by Starburst. For more information, you can see the show notes.

0:01:18 Adrian Estala
Welcome to Data Mesh Radio with your host, Scott Hirleman, sponsored by Starburst. This is Adrian Estala, VP and Field CDO at Starburst and host of Data Mesh TV. Starburst is the leading contributor to Trino, the open source project and the Data Mesh For Dummies book that I cowrote with Colleen Tartow and Andy Mott. To claim your free book, head over to starburst.io.

0:01:48 Scott Hirleman

Data Mesh Radio, a part of the Data as a Product Podcast Network is a free community resource provided by DataStax. Data Mesh Radio is produced and hosted by Scott Hirleman, a cofounder of the Data Mesh Learning Community. This podcast is designed to help you get up to speed on a number of Data Mesh related topics. Hopefully you find it useful.

The bottom line up front, what are you gonna hear about and learn about in this episode? I interviewed Alex Bross, VP of Data Engineering at Fifth Third Bank. To be clear though, Alex was only representing his own views on the episode. We talked in general about the data literacy upskilling and their journey thus far and what he's learned. So here are some key takeaways or thoughts from Alex's point of view.

Number one, start from empathy. Being able to empathize with someone, will give you a far better chance of understanding their context. And analytics is really about understanding what the data shows with the applicable context. Number two, there are three main barriers to change, logic, credibility, and emotion. Don't try to skip any of them. Number three, microservices can teach us a lot about how to to distribute data, especially from the people angle. When moving from the monolith and single branch development to API-driven microservices, how did people feel? How did we get them to the right place mentally and capability-wise? We should learn from that and leverage it for a similar journey with Data Mesh.

Number four, don't try to do all your disruption at once. And Data Mesh is a disruption to the status quo. The business has a cadence, look to fit to that as best as possible. Number five, when looking where to begin with something like Data Mesh, look at need and/or desire. Is there a team that is really struggling and needs some change to really make some positive momentum? Or is there a team that's just very willing to try it out? Number six, it's very difficult to have positive change with the team that is already struggling. If you're going to work with them now, make sure to be there to help, instead of demand change.

Number seven, catalysts lower the amount of energy needed in a chemical equation, that's what the definition of catalyst is. So be a catalyst for change. Make it less difficult. Make it so that they don't have to put in as much energy to make a positive change. Focus thought on that and many or most domains will welcome you with open arms. Number eight, business users are by and large, much more digital and data literate than historically. With a moderate amount of upskilling, they'll be able to leverage low-code no-code platforms for scalable and repeatable data consumption. Zhamak has been skeptical of low-code, no-code, but that's more on the data production side. I don't know what her opinion is on the consumption side, and I

don't really have a view on it just yet. Number nine, if your data consumers can see the value data literacy can unlock for themselves, and their careers, and their domains, they will likely be hungry for training.

Number 10, failure doesn't have to mean disaster in data anymore. This is a concept that comes up in a lot of episodes. With fast feedback loops, you can quickly adjust. Make sure people understand that, perfect is the enemy of good or done, right? Don't go for perfect, just get something out, get the feedback, improve it, improve it, and keep doing that. Number 11, if you do a boot camp, look for practical applications over theoretical. How can someone take this and apply it to their job, to their domain today? Actually, doing something now while training makes it more tangible and more likely to stick.

Number 12, that practical work can have a positive impact now. Set milestones for trainees around real contributions to real use cases as they learn and gain the skills and confidence to contribute back. You don't wanna say, "This is this massive thing and you're expected to be a data engineer by the end of a five-week training when you haven't had any data engineering training before." But they can really make a lot of progress in value while they're doing this, and that makes them more likely to want to work with data as well, going forward.

Number 13, from Allen Holub's Death of Agile presentation, "Training a team for two weeks slows them down for two weeks. Not training a team, slows them down forever." So think about how you want to actually leverage that. You can't just do nothing but training, but at the same point, you've got to upskill your people and you can't just go out and try and buy the talent externally. Number 14, starting change discussions around handing over data ownership is a big potential friction point. If you can give people the capability to own their data and the desire to learn and use their new capabilities, the ownership conversation that transfers to them becomes far easier because they're already thinking about what they could do. And they're far more comfortable rather than this nebulous, you now own the data.

Number 15, it's easy to fall into the trap of trying to level up data literacy by hiring, by going external. If you want to upskill your people instead, look to the incentives of who might approve a data literacy program and a line as best as you can to those incentives. Finally, number 16, if you want to get a data boot camp approved, write a business case for it. People invest in what makes business sense. Make your data boot camp make more business sense. With that bottom line up front done, let's jump into the interview.

Okay. Very, very excited for today's episode. I've got Alex Bross here, who is the VP of Data Engineering at Fifth Third Bank. To be clear though, he is only here

representing his own views, but we're gonna be talking a lot about how you actually get to where your team can do something like Data Mesh, right? And so like the data literacy and upskilling that we need. And we're gonna be talking about a lot of different aspects here. I think Alex's view on this is a very, very high empathy view, which I think is really important to doing Data Mesh, right? Especially, when you think about it, a lot of people want to go from a zero to a one, when it comes to, "Are we doing Data Mesh or are we not?" Right? Versus this is a transition state. And so I think like, how do we work with our people to get where we need to go? How do we think about that? It's not really feasible to go out and hire an army of people. So we're gonna dig into a lot of the things that he's seen through Fifth's journey thus far, and just how do we get where we wanna go? And like how do we think about working with people so they're bought into the change instead of the scared, the kind of push back and pain that change usually causes.

And then, well, we're gonna talk about why you kinda wanna go and find the business people and teach them data, rather than trying to teach the data people all of the business, right? Data people obviously can learn aspects of the business, but we have this thing of trying to teach the data people to now understand the entirety of all of the domains and the complexity of that and how that causes challenges. So with that as the backdrop, Alex, if you don't mind, if you could give people a bit of an introduction to yourself and then we can jump into the conversation at hand.

0:10:53 Alex Bross
Yeah, for sure. Thank you for that, Scott, I appreciate that. So yeah, so I've been at the bank, Fifth Third Bank, for about three years. I joined in April of 2019. I am the Vice President of Data Engineering. Although most of my career, interestingly, has been focused around software development. So only probably like the past five years, I would say, have been pretty centrally located or focused on data and analytics of some kind or another. I work with an amazing team of people at Fifth Third. You have probably seen maybe a few of us hit the streets recently with our work around Data Mesh. And so if Fifth Third rings a bell, that's probably why. I have three amazing kids. I have a beautiful wife that's incredibly patient with me and our kids. I'm an Avid World of Warcraft player. So you can ask me about that too, if you want. We can get into that, maybe that would be interesting. And I have tons of experience in Agile, Lean Six Sigma data software. People's leadership is probably my passion. And the industries I've been in are largely banking and insurance.

0:11:49 Scott Hirleman
It's funny because I think the World of Warcraft thing is, it teaches you how to build the team and to manage people's rules relative to a single raid versus the overall kill, then all of that fun stuff. I stayed away from WoW because I knew I would get a little too hooked on it. But yeah, I think it ends up playing well into that people

management side.

0:12:15 Alex Bross
Yeah, for sure.

0:12:18 Scott Hirleman
Yeah, so let's start with, thinking about your transition into Data Mesh, right? When we think about the people and the upskilling, it seems like, "Okay, now does everybody have to become" I kind of hate the citizen data scientist concept, because we're trying to make everybody do everything, and it's just adding a lot of cognitive load. So when you started to look at what you would need to do this, was it that you were looking at, "Okay, let's go domain by domain, let's kind of have built a broad base layer." Like what have you found? Like maybe what approach did you take? And if you were to go back and give yourself some advice, what did you learn from that? What might you do differently as well?

0:13:08 Alex Bross
Yeah, yeah, that would be an amazing super power if I could go back and give myself advice, I would use that all the time, probably. I would say probably the biggest piece of empirical evidence I leverage and I love the way that you described this at the outro, which was to be being, I'm kind of empathy-focused or empathy-leaning when it comes to these kinds of change. Because I tend to think that empathy will unlock all your ability to understand people's contacts and where they're at. And their own change curve will unlock all kinds of different avenues that might help accelerate that in the future. But this paradigm shift in data is not unlike a software paradigm shift that took place when microservice architecture was introduced. And we went from large Monolith, like single branch development into much smaller API-driven and micro-services architecture and distributed software engineering. And so I just look at, "Well, what was that like for people? How did we crest that change curve and what were kind of the patterns and themes that were emerging at that time, and can we apply any of those to the context of data? And so one of the first things that jumped out to me because I happened to be near ground zero, I guess, or epicenter of when DevOps was becoming a thing, probably.

I don't know, this was maybe like 2012, 2013, when it started to hit the conference circuit. And a lot of what I saw was just like a huge focus on employee upskilling and training. And it was at the time all the analysis was happening around like what does it take to just outright by a DevOps tool chain in an entire function to go with it through a big consulting firm or something like that, where they can just bring the whole concept and then balancing that with like, well, you have a workforce today, that is skilled in a lots of different ways. And is expecting a certain amount of disruption and change to their own context. And so how do you take advantage of

that in the face of really large kinds of change, like we're talking about?

0:14:55 Scott Hirleman

Yeah, I think anybody who's watched a lot of Zhamak's presentations. I love it when somebody says, "Oh, Data Mesh feels like, as if this massive reveal of Data Mesh is a lot like microservices versus like that's where she said she's gotten it because that's what worked in software." So exactly, but we need to go and talk to people like yourself that have both of those perspectives because this is a big change. And when you went to microservices, kind of a leading question, but did you go in or would you recommend to go in and smash the monolith with a big sledgehammer so it just goes out and just shards? Or do you look at that thin slicing model? And kind of what do you think about that stage two as well of microservices? And what does that mean for the people where you started with, "Okay, we've got a couple of leading domains, and then all of a sudden we're going wider." How do you manage that or what did you learn from working through that as to what's a good way and what's a bad way from the people's side to get them prepared for this change and to work with them through this change? So you're not having to thin-slice for eternity, right?

You're not thin-slicing out a new service every three weeks, and you're getting to a 1000 services, so that's 3000 weeks, that's 60 years, if my math holds. Like how do you think about those two different diametrically opposed, "Don't rush too much, but also we have to get there."

0:16:36 Alex Bross

Yeah, yeah, you got it. Yeah, so there's definitely one thing to feel that urgency of change because that will usually prompt you to go take an action, go somewhere, go in a direction that's oriented toward achieving that goal. There's a world I wanna live in, which is the juggernaut, like swinging the sledgehammer at everything, disrupting everything, breaking it apart until it makes sense. And then there's the reality of working in an industry that's very quarterly focused or year end focused. And so we have products that need to have some kind of amalgamation of change that they incur, and those are facing lots of disruption and transformations in and of their own accord. So I guess my answer, my simple answer would be just go where there's a burning need, which is a really easy answer to say of like, "Oh, well, there's a group that if you have a claims function or you have a retail function or you have a whatever function, and they're being the most disruptive because of some digitization that's taking place in the industry, that's like a likely place to go."

Conversely, if you have a place that doesn't necessarily have a business need to change, but they have a willing audience of people that want to change, I also like to explore those areas equally. And to me, the whole point of that is to get to as quickly as you can that validated learning. Let's try something with Data Mesh that gets us

some actual feedback and experience of going down this path. I use this story all the time, so for anyone that knows me that's listening to this, this will probably just be written for you by this point. But I used to work at a company that had this innovation showcase every year. And Fifth Third does this as well too. But this was just at a different company. And this was at the time where Oculus Rift was like a new device. And VR was starting to become a thing that wasn't just from Virtual Boy back in the '80s, but it was a thing that was coming back now, right? Yeah. So we had an Oculus that was in this avenue that connected all the buildings. And you can go here and experiment with it. And at the time, it was like putting it on.

And it's a little bit disorienting. The tech wasn't quite there. You could see the refresh rate happening, and it was rudimentary at the time, this was an early, early, early adoption, early phase of it. The next year they brought it back, there was a whole immersion haptic feedback like lab that you could go in and you could experience it. And the difference in people being able to understand what virtual reality was actually like and being immersed in that and being able to see and interact with it, prompted so much more change or so much more interest in that thing. And so I just apply that to anything where we're trying to encourage or adopt a lot of change potentially with urgency or haste, but how quickly can we get to something that people can actually see and interact with? And I think there's so much power in being able to do that. In terms of that power being harnessed back into getting more people to adopt, getting more interest, getting more engagement in that idea, so the long answer was that. The short answer is, go to where there's a need, go to where you have a burning platform or a part of your business that is absolutely facing disruption or to where people just are willing and wanting to change, there's a lot of value to be had in those areas.

0:19:27 Scott Hirleman
So the second is probably a little easier from a change management perspective, but let's talk about the first of where there is maybe not as much of a desire from that standpoint to change, but there is that need. I think the one that most people in Data Mesh are really trying to do is, we need your data, and it's like, but it's not helpful necessarily to the domain. And let's not talk about that, because I think that is the thing where you're not finding the right incentives for that person. So let's not jump there just yet, let's not go. Alex, please sell for everybody the incentivization problem of anything related to work ever. But when there is that burning need, is it about showing them. Have they typically known that or are they typically afraid when you're looking at something like Data Mesh, are they like, "Well, am I automating myself out of a job?" What have you found is a fear reaction, is that a, thank you you're coming in, you see us, you see that we need some help or is it just kind of all over the map?

0:20:41 Alex Bross

Yeah, no, you got it. You hit all the things there, so I think there's so many forces at play when it's like, "What's blocking people from potentially changing." I think when you look at those burning platform areas too, they're burning for a reason, so there's usually not a lot of opportunity to be like, "Hey, I know you guys are under water, but then here's another anchor of change that you need to go incorporate into your value stream and figure out how to optimize what you're already not doing well or what's already on fire here in your purview." And so the wrong way to do it is probably the easier answer versus to just go and try to manifest a bunch of change in an area that's already overburdened. I think the way that I've seen it generally work well is, like I said, if I go all the way back to the beginning when you started to talk about empathy, is exactly to your point, demonstrate that like, "Hey, we're here to help and support, and it's really scary and adopting change can feel all kinds of different way."

I make people cross their arms the other way, and I'm like that's kind of what physical change feels like, it's awkward, you can do it, but it feels weird and you wanna go do the other thing you were doing before. And so getting people to look at whatever change we're talking about, in this context, Data Mesh, so we're talking about all aspects of the data supply chain, and generally speaking, we're invoking the most change on either those data producers at the source system side or the data consumers at the downstream reporting side or the analytics side where they're trying to incorporate new kinds of data into their work stream. And for that group, for those groups, you really wanna anchor to like, "Hey, this is gonna be a catalyst for you, and what a catalyst doesn't do is put a bunch of energy into a solution, it takes energy out."

And so we wanna try to find a way to make what we're experimenting within Data Mesh easier than what it is you're doing today. When you look at the actual data behind the Data Mesh strategy, and when you look at the amount of time people spend trying to find the data and make use out of it. And then you look at the bottleneck that we create through data centralization of an enterprise shared service, it doesn't make logical sense that both of those things would be increasing over time. Like if we're getting a bottleneck of data centralization, we should be making it easier on the downstream side or the consumer side, and what we're seeing is the opposite.

We're still not able to make a signal out of noise on that end as well, and so when you have two of those things that are to your point, diametrically opposed and increasing at the same time. Whatever the current context is, it is easier, and it definitely happens through validating what those folks are doing, even from the change management side. It's very scary to look at some kind of optimization play that makes it feel like, "Well, what I'm doing today, it may not be relevant tomorrow," and

so for sure airing all of that stuff out. That's where I do think you need to take the slide sham too, you can't dance around the element of organizational change management. I think you have to go forcefully, it might be tough at the beginning, it's gonna feel like you're giving things up, and that sense of loss is really strong for people, even in the context of work.

And so being empathetic to that, being supportive, not just dropping in a PowerPoint strategy and then never revisiting it and leaving people up to their own devices is definitely not the way to do that. And so I'm always in favor of the coach or the pod going in and talking to working with the team in their context and understanding what it is, building credibility, addressing the emotional constraints and invoking change that way. Which certainly is probably not the fastest way to do it, I would argue, but probably in the long term is definitely the better way, the better approach.

0:23:50 Scott Hirleman
It's kind of like building a shoddy foundation, you can go in and you can do that foundation very, very quickly. And you know what, if this is gonna be a temporary thing that only needs to stand for the next few months. It's a grain silo that you're gonna knock down and whatever. Okay, that's not a big deal, but if it's only for temporary storage, if you need this thing, they're crane silos that are 100-plus years old or whatever. You need to build the right foundation, so I think a lot of what you're talking about though, becomes a concern for people when they hit stage two, when they go wide, you're still doing one-on-one conversations. Do you think that that's still the case? What a lot of people are saying is that it is. Some people are saying, "Well, then we can't ever scale enough to get past what we talked about, the thin slicing," is it that you just kinda have to have a bigger concept of a domain, you're not going two-pizza team by two-pizza team domain. If you haven't hit there, how are you planning on it or what are your thoughts there?

0:25:07 Alex Bross
Yeah, that's a great question. No. You're spot on. I think that we try to act as multiple areas in terms of my current scope at Fifth Third, we try to act as multipliers, so we know, yes, the high speed direct communication one-on-one is the most powerful form of communication, but the least scalable, so especially when you look at that just requires exceptional people doing exceptional work, and that's just a finite resource generally speaking. And so what we try to do is look at... This is a really exciting thing to me about Data Mesh, finally, where I feel like the data technology is really keeping pace finally or catching up to where its software brethren has been for the last couple of decades in terms of... We have a group of consumers, if you think about the data supply chain again for a second, that are going to be consuming analytics somewhere downstream and those users are much more capable, I'm

thinking... I'm speaking of business users now like people in lines of business that are consuming data, they're much more capable of using software than any cohort has ever been in the past, everyone has a smartphone, everyone generally knows what Software as a Service is, everyone knows how to operate and configure things for the most part.

And we're not really taking advantage of that. We're still largely holding up the industry of Financial Services on the back of Microsoft Excel, and so we have to find a way to increment ourselves away from that and really start to introduce things to people or platforms to the people that start to feel a lot more like things are already used to. So we're finding out a ton of value in looking at platforms and introducing platforms that are low-code, no-code as much as they can be, but even if they are, even if they do require some experience in development or even language or query language in general, like we're finding that that's not that big of a barrier to crest, for the most part, we can get people there with training, and I think that's the differentiator is that you really do need to look at how can you pivot some of these change efforts that we were talking about now into very direct investment of up-skilling of individuals in those target domains.

0:27:05 Scott Hirleman
Zhamak has talked a little bit about how she's afraid of low-code, no-code, but that's on the data production side, right? Exactly what you just mentioned is on the consumption side. Because low-code, no-code, it scales until it's often a black box, it's often that thing. So when you have a real scale need which you do a lot of times on the production side, especially when something becomes valuable. As you really start to hit that knee in the curve or whatever, as soon as it starts to value, then your unit economics start to collapse or it can't scale or things like that. But exactly what you were saying there is that part of what we need to do. What do we owe each other? And what do we owe each other? The producers owe it to work with the consumers to get them to a place where they can actually leverage their data, and then the consumers are actually owe it to the producers to pay them off in some respects, that can be that the greater business that people get rewarded for that or that it can be, "Hey, we're gonna make sure that we circle back information with you or in a lot of financial institutions, it's literally paying.

It's literally domains paying financial incentives from one to the other, but one question, let's split the upskilling conversation into producers and consumers, which do you think is more difficult and where have you been focusing on? We're lowering the bar, if we're making it so that we can use data more. Well, it's not either, it's and basically, but lower the bar to leveraging data for the consumers, and we have to raise what we're actually sharing with people. So where have you found the low-hanging fruit there? So people might wanna start there and that they might

wanna start a gradual change on the other aspect or what have you found when working with people on that?

0:29:18 Alex Bross
Yeah, great question. So a couple of different things, I think a big barrier for people is just trusting the data that they're being presented with. So how do I know when that was relevant or I'm not totally familiar with the nomenclature that we're using or schema structure or anything like that. And so a lot of it is just getting better validity into the data which is establishing data quality rules, leveraging all of our data management practice and capabilities. And quite frankly, building out a really robust data catalog, I think that that is a really big un-locker for an enterprise of any scale really. But if you're trying to get people to trust data, you should put more information in context around the data in and of itself. So leveraging some catalog ideas is huge. To your question about producer versus consumer, one of the things that, at least, again, speaking at Fifth Third here. We didn't want to necessarily draw a hungry crowd by investing in some big upskilling effort that didn't necessarily have relevance to that group context of their day job. So we looked at the consumer side for sure because that's where we were feeling a lot of the pain. We were spending a lot of time centralizing data changes, and the reason we were doing that is because the consumer side didn't access to, didn't trust or didn't know how to make changes to their data themselves.

So if we were invoking some kind of upstream source to change them, all of that stuff had to be then bottle-necked into a centralized data group that was making those changes on behalf of the consumers to make it match one to one. And that just breaks down because those data aggregators, those people in the middle just don't know the context of that data like the consumers do. And may not be as familiar as the upstream changes are as the producers are. So it just kinda caught in this middle land of like, "Well, we can't really be as effective as we want to be, but we think by federating some of these skills out, we can be really effective."

So to your point earlier, I think that any industry-related, we'll just say corporate industry right now, has the tendency to scale things before they actually exist, because we're sort of this once bitten. Twice-shy sort of mentality of, "Well, we know we're gonna need scale, so we should start thinking about that in the first place, and I think it's really difficult to scale something that doesn't exist. So our first attempt at this was like, "Hey, let's develop a bootcamp style learning initiative, let's target it largely at data consumers or invite largely data consumers," because they're gonna be the hungriest for this change, they know that if they just knew how to do this or they just had access to it. They just could trust it a little bit more, they could probably do some of these changes on their own or they could probably control some of their own destiny.

And then we just build a road map of things that we thought would be very transient skills, that wouldn't be something very specific to learn a Denodo Platform or learn a data eICU platform that's really strategic. It's a very specific use case of data, but it's more of like learning SQL, like Learn Structured Query Language, learn Data Visualization, it could be Microsoft BI, it could be Tableau. It could be whatever is your visualization of choice, but as soon as you start to learn and be a little bit more aware of table structures and RDBMS and just basic data concepts. That really accelerates people's own ideas and thoughts in the context of their own work, and so that was sort of the bet that we made at the beginning, and we're sorry to see some of that pay off.

0:32:25 Scott Hirleman
When you're having those conversations, to me, it's funny because what is a data product? That whole conversation everyone's like, "What exactly is a data product and it's like it's different from everybody 'cause it's... It's not that... What is a cow? It's like, okay, it's just that animal, but it's like, okay, but to a farmer, it's a source of milk or income or whatever. To other cows, it's their best friend. I don't know if you've ever read that research, but cows have best friends, so it's all that fun stuff.

0:32:57 Alex Bross
No, but I'm going to immediately after this. Yeah.

0:33:00 Scott Hirleman
Yeah. So one question I've had or that's been forming in my mind more and more that you really started to hit on is we are seeing that we need consumers to have better information flow. Where are you working with your producers to say, our ownership extends to because a lot of this is, how does this actually get used, and so people are afraid. Like Marisa Fish in her episode really solidified this thinking for me of when we're sharing information. Are we sharing the information so someone can augment their own thinking, or are we sharing it with the packaged insights or are we sharing it with the packaged insights and the recommendation, the so what?

And I guess where I think a lot of people are concerned on the producer side is that they have to go all three or that there's not a clear thing as to why we are exchanging this information. But that you at least wanna see that so what because it might inform what you actually share. You might wanna see what other people are getting from the insights, but that your ownership doesn't have to extend that far. Have you started to play around with that? It sounds like you're just having a lot of empathy for both sides and making sure they understand each other, so are you working on that yet or?

0:34:34 Alex Bross

Certainly, yeah, definitely. We have a couple of POCs in this environment. We're definitely much more of the theoretical side of the, I would say, this problem right now. Some of that has actually been manifested in our group though is we're looking at things like trying to take a building block approach to data producers. So in terms of just using customers as an example, like everyone can relate to customer data, so if we're trying to produce a published data set that's a customer published data set. We know lots and lots of groups get tremendous value out of just a well-curated customer published data set that they can leverage in terms of the API interface or whatever. However they want to exploit that or pull it into their own analytics suite, but they don't have to go find customer data, now it's readily available and published in version.

And then if you have a group that's further down that supply chain that needs to make some kind of meaningful transformation to it. So it's not just customers anymore, maybe it's like a delinquent customer or it's whatever a customer published data set, that could end up becoming its own published data set again. And then you start to have this Mesh start to be produced across whatever your physical data layer is, that's the idea right now, is that we start with these building blocks, a set of published data sets or curated datasets that could then be transformed later on down the supply chain. And if they hit a certain threshold of data management or data classification type, they could go boom, right back into curated published data set or they could remain. Like I said, within that consumer back log of how they do their end user reporting or their downstream reporting. That's some general thoughts on that. I'm not sure if I totally answered your question there, but like I said, this is much more in the theory of practice for us at this point.

0:36:07 Scott Hirleman

Yeah, it's just something that, from a lot of what you were saying, it's a difficult question because I think a lot of what you said is that we kinda have to test it, and I think it will be different for each organization when we start to think about it. We keep trying to have these very, very firm hand-offs where it is, this is a hard wall and we pass it over the wall versus like, hey, when you think about maybe American football. If there's too much of a handoff versus you having the second of putting it in somebody's stomach before they grab the ball. I'm making sure that there is this proper hand-off, that there is something where we have that and that we limit the number of hand-offs, but that we also understand. It's not that the quarterback doesn't have any idea, and sorry to all international audiences, but the quarterback knows where the running back is gonna go. They lack complete contacts, they can work with them to make that a more effective play, and I'm searching for a better analogy, that's more universal.

But I think a lot of what you're talking about is, as well having kind of empathy for yourself as an organization, in that you don't have to get it right right off the bat. That you're focusing on learning, you're focusing on delivering value, because if we're not delivering value, if all we're doing is learning. We're not gonna get the funding for that for very long, but a lot of what you're talking about is that fast feedback loop, that iteration that we're testing things out and seeing. We're telling people not to lock in, right? This isn't the way it's going to work, this is the way it might work if it works, right?

0:38:19 Alex Bross
Yeah, yeah, well, this is the opposite of mind sweeper for us. We're actually looking for those holes and the Swiss cheese to fall through or those fumbles if we're gonna use that one. Although I'll be honest, my awareness of football is super limited, so I'm with your international audience on that one, but I think that what we're trying to do is tip over a lot. It's never gonna be pixel perfect, that's not how many good ideas start. So we're trying to, in this case, perfect is obviously the enemy of good when we're trying to incorporate change like Data Mesh or anything in that atmosphere. So yeah, I can give you an example even too, in this bootcamp that I'm talking about.

We learned really quickly that one of the instructors was using SaaS as a SQL editor, and we're like, "Wow" But some of the participants were like, "I could actually use a lot of what is in SaaS for my current context," and we were like, "Hey, why not teach that then?" So right on the spot, we brought in our product champion, we picked up on a couple of different threads that people add in their own use cases. Relatively SaaS is gonna be super complicated depending on your use case for it, but something that's low hanging for people to leverage to make their current context of what they're doing better, and like I say, address the ultimate goal of getting out of the Excel, so I'll keep beating that drum as much as I can, although I am also a fan of Excel, I should say that probably as well, but.

0:39:33 Scott Hirleman
Yeah. I'm a huge fan. I still love Excel, but that's because when I'm dealing with data, it's generally small enough and it's generally I'm poking at it to see what falls out, and then I go back and say, "Okay, here is the thing. Let's institutionalize that. Let's codify the actual transformations if we want this, but here's the interesting incremental insight," but so much of my stuff is kind of one-off point by point driven. It's this podcast, I'm not having 10,000 people on the podcast, right? It's going out and doing that. But I really liked what you just mentioned there which I think is part of what we're talking about here is that active listening. It's not that your job is to create the data product and hand it off, your job is to create the context in such a way. As a data producer, your job is to share the context of what's happening in such a way that others can leverage it.

And I think, again, that it just keeps coming back to this, how do we do high context exchange and when you are doing these upskilling where are you finding that people are really, really bought in. How are you selling it to them that we're changing the way everything is done and it's kind of put up or shut up versus like, you have the knowledge, we want to better put you out there. Make you more effective. How have you found that and have you found that there are people pushing back or if they are. It's kind of a quiet push back or how are you feeling that kind of going forward?

0:41:24 Alex Bross
Yeah, the pushback has generally been like, "Oh, I'm not sure if my supervisor will let me take that much time away from my day job to go learn." And that's pretty like, I would say, commonplace, again, if we're talking about the corporate industry here again. There is an influential figure in the Agile world, his name's Allen Holub and he has this beautiful quote from some time ago, I can't remember when it was. I think it was in a presentation he gave, it was called The Death of Agile, and the quote he used was training a team for two weeks, slows that team down for two weeks, but then not training that team for two weeks slows them down forever. And so I've always been a huge investor in that way of thinking. And so whenever I hear pushback around like, oh, so and so he does, I light up, I'm like, "Oh, I got all these reasons why. And there's this amazing organizational psychology spend on why you should do this stuff," and so the pushback is larger than just scheduling and bandwidth and capacity, which is a real constraint, but also a very solvable constraint from my perspective, the willingness has been off the chart, so I was actually fairly nervous.

We got to this point of analysis where we're like, "Hey, people just generally seem frustrated, there isn't anyone that seems lost or I wouldn't know how to incorporate some of these skills, or I don't know how to solve these problems." It's like people generally see the solution to the problems of life. I know I need to learn a skill or I know these platforms are falling over for me, or I know that change is happening upstream and I don't know how to incorporate it downstream. But they're not opposed to the idea of learning a new skill. And so we did intentionally steer any kind of conversation away from ownership, because I feel like that, again, unnecessarily cloudy things. It might be like when you say ownership in the context of a matrix organization, there can be all kinds of things like audit trail and delegation and corporate responsibility and stewardship. And all those things come into play as forces, and if you can anchor away or steer away from those things and anchor to just someone's ability to learn a new skill. A lot more people fall in line or are appreciative or encouraged by that way of communication than like, "Hey, you need to do this because compulsory kinds of things are really at the outset, we just look for a commitment over composing and we really want people to be bought in and

understanding."

So from that perspective, I will admit, with the first few cohorts, we've stacked the deck a little bit 'cause we've looked for people or personas. There's probably what I would say, maybe four or five dozen or so in this mix out of these federated data engineers, is what'll call them. I won't say data citizen or citizen data engineer, data scientists for sure. So what we found is that, yes, to a person, they've all been able to apply the skills so far. I think the feedback has been a little bit, maybe this subject matter is out of place, we taught SaaS right away. But then SQL didn't come so much later, so there was a little bit of juxtaposition there. So there are some things to iron out. But again, we're looking for those things that don't make sense, we're all data engineers, all this stuff makes sense to us, but where do these areas not line up? And so we've just found that we drew a huge crowd, initially we had to turn some people away or point them to virtual training. Which is not the best way to learn for sure, but it was at least something to offer versus the whole classroom experience.

But once we were able to get over the hurdles of where the funding came from, and how do I get time away and where is it gonna be located and the logistics of all that stuff. Man, people, we're just turning and burning on this one, Scott, to be honest with you, like it's just been amazing to see people unlock. I look for those moments in my career now of like, when do I see change happen in a person. Like when can I see a team of people or an individual realize something or become aware of something that they weren't aware of before or unlock something in their contacts that nobody else would have been able to accept for them and given this opportunity. And there's been so many of those so far, which has been one really encouraging, and then two, just validating the idea that people desire to change. They want to change, but it has to be the right kind of change, and it has to be not the, like I said, the quarterly blast of communication type of change, it has to be the, "Hey, we're here. We're building credibility with you. We want to see these things successful and ultimately we wanna solve problems that make your job easier." And people are responsive to that, I would say.

0:45:28 Scott Hirleman
Yeah, I've been doing some of my Mesh musings. Which I've kind of told people I really don't enjoy doing Mesh musings 'cause it feels very weird 'cause it's just me talking. But part of what you were saying there is about the buy-in, and I think a little bit of what was underneath there is one thing that I said, and some people, again, get frustrated by it. But I'm like, prepare to repeat yourself and then repeat yourself again, right? You're talking about that quarterly thing, it's an email, right? Did this email go out? "Okay, this email went out, boom, boom, I'm done." I don't have to communicate anymore and it's like, that's not how you actually work with humans, humans don't. There are very, very few people who hear the thing the first time. I did

some interviews with Zhamak, we're cutting that up into some smaller episodes that are about a specific thing. And each time I listen through, I learn something new, or I take a new focus in a new perspective. And so it's not that she has to repeat it over and over at me, but I'm listening through and I'm like, "Oh, here's a nuance, here's a nuance, here's another," and so having the empathy around that, I think.
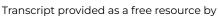
And you talked a little bit about this earlier as well that people have a willingness to change, but we have to manage the cognitive load. Are you finding that with this bootcamp that people have enough cognitive load capability because you're saying, I don't know if my manager will give me the time, but it's not just the hours in the day, it's also the free brain space to be able to do this. So how are you working with managers to let them understand that? To again, show them that, "Hey, this might slow your person down for the five weeks or whatever of the bootcamp, but that you are going to see the benefits over the next X amount of time."

0:47:38 Alex Bross
Yeah, yeah, that's great, that's a great question. I've always been probably really terrible at developing ROI on stuff. So take all of what I'm about to say with the greatest soul because it's not my forte, but I would say that I like the idea of solving really interesting problems. Most people when you ask them, I'm like, "Hey, what'd you be frustrated by? What are you struggling with?" That's a very easy question for people to answer like, "Hey, what sucks?" People will give you tons of things that aren't going well, and usually there's a lot of really good valuable insight in trying to dig deeper in some of those things. Especially if you're not biased by like, well, I know that sucks, but here's all the reasons why, and there's nothing we can do about it. But if you're gonna do it, like I said, willing to synthesize some of those problems into real use cases, it becomes very easy to tell you why you're gonna benefit from this thing.

Everyone will benefit from SQL. We know that, but also when we're talking about lines of business reporting teams that can't get a real-time data feed or they're operating on analytical data that's potentially two weeks old. That is not effective enough to be relevant with the pace of disruption that we're seeing and so everyone's familiar with that pain and feels it every day. If we can short circuit that, generally, we get fairly responsive participants to that. I would say that the cognitive load is a real thing. I think that we're probably testing the boundaries of it. I don't expect that everyone retains everything they learn inside of the five weeks that we're talking about in terms of the total duration, but we're trying to build in as much intention as I said. When you have about half of your week spent in the classroom and the balance of that week is not spent back at the bank in this situation, I think doing your day job, it's really synthesizing that into the use cases that we identified pre-bootcamp.
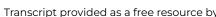
And so you take those real use cases, they kinda follow you throughout, and then we have milestones that are like, "Hey, after week three, you should be able to document your domain in a data catalog, and if it doesn't already exist then. If it does exist, you should be able to contribute to it in some way or write an article against it or whatever or revise the contract, etcetera." And so we have those milestones built in that helped anchor people toward like, I know I'm gonna need to use all these things for a culmination of some really cross-functional of that document your domain in our data catalog. Second milestone is like, hey, a published data center contributes to it, and so these are very real things that people can start to iterate on as well as the own use case that they have in their group.

And so what I found with developing a concrete use case with a problem statement and put even potential solutions at the beginning, is that it veers people away, it steers people away from this idea that they need to retain everything. They start to really figure it out, I need these things to fix the context that I'm trying to work in, to fix the use case or the problem that I was having with data prior to bootcamp. And so if we can get people to steer that way. They start to maybe ignore the things or they de-prioritize the things that are interesting, but maybe not relevant, and that has been effective. But there's a lot of assumptions built into this working well, which is like, hey, this balance of days that this class was spending back at the premises of the bank are not spent doing their day job because that's too much context switching. That's negative context switching instead of like, they can be focused on elements of their job that are aided by the skills that they're now learning, which is much more of what we've seen. At the same time, we have these background structures, we have this whole federated data engineering, Microsoft Teams channel that people can contribute questions to in a compendium information and an FAQ. It's ever growing about our platforms and how to get access to things, and it's amazing to me actually that the things we struggle with most are probably not the synthesis of SQL into whatever people's jobs are.

It's really more like, "How do I get access to data?" Like that becomes a really big stumbling block for us. So that's some of that supposed to use mentality that we're trying to run into and create roles that are generalized and relevant enough for people that get them passed that 50% of the problem we're experiencing. So I guess I'll sum that up 'cause I know I rambled a little bit. I would say that the cognitive load is a real thing, we're trying to stay as we can to it, understanding people aren't gonna retain everything and certainly not trying to survey or quiz people all the time, 'cause that's even a different kind of load that people have, the feedback load, I'll call it. But it's really trying to present as much like of that thing that I can feel every day when I'm in my job and how these skills will align with making that easier or helping solve that. And we're doing that with coaching and real-time support from our team as well as on my team as well, so all of that.

0:52:07 Scott Hirleman
One thing that you said in there is the not quizzing people and the concrete use case. And I think if you follow any software developers or Senior Software to devs on Twitter or anything like that. Every week you'll see people saying, "Hey, here's the real secret of being a senior software developer, I Google things all the time, I have to search for these things," because a lot of what you're teaching them to do is to apply the knowledge. Okay, what's the difference between a join and a left join, isn't it the same thing, or an inner join or an outer join. All of those things, it's like, What are you trying to do? Let's focus on what you're trying to do, and then you can go and you can figure out the specifics, you can search for the actual specifics, and then you kinda test it and make sure, okay, did this do what I thought it was gonna do? But you don't have to memorize every statement in SQL, you don't have to memorize all the variables for all of the stuff that your domain uses, your stuff, you don't have to memorize the table names. Figure out how to look up the column names.

And so it's like, okay, I don't have to memorize what this is. I think exactly what you're talking about, and the quizzing people. I think it also puts a certain pressure on a lot of people that makes it like, is this pass or fail versus we want you to succeed, work with us to help you succeed, and you might not get perfect at this. And you might always be terrible at SQL, but you might know exactly what you want to search and then you just partner with somebody that's gonna help you out a little bit. But that you're like, okay, I know I wanna do this and this and this, and it helps you at least get into the dialogue as you get comfortable with that. I think a lot of what you're talking about is something that I thought that there was a thing in chemistry which there's not called the transitive state. And so I started trying to look for that for an analogy, and it's like, no, I'm thinking of the transitive property in mathematics or whatever. But when we're doing Data Mesh and every domain, we're constantly always in somewhat of a state of transition. If you're not, if you're static, then you probably shouldn't have been doing Data Mesh 'cause you didn't have enough challenges, you didn't need the ability to be doing Data Mesh.

But there's stuff good enough for now and stuff. I don't wanna say everything needs to be changing every day and all that stuff, but we have to understand what got us here, won't get us there. But we also don't have to be there today, so that we can work towards it. You don't go in with the plans for a building and it's built to that day, you build it up over time. You look at companies, they aren't built in a day, they can somewhat be destroyed in a day, but they aren't built in a day, you build it up over time. That we have this empathy towards people of saying, we're gonna get you to where you're gonna be more effective. This is gonna be better for us, this is gonna be better for us, that's why we're investing in you, but it's gonna be better for you whether you're here or whether you're somewhere else, but let's work together to

make you more effective at your job. And so then you can do more amazing things and you can unlock value and you can grow, and that we're not just trying to replace you with the data, we're trying to unlock it for you.

And I think that's coming through in all of the little things, it's not that you said that exactly. But it's like every little thing that every way that you're talking about approaching it is talking about working with people to understand that. In the pre-call you can't hire your way to Data Mesh. When you're going into these domains and you're saying things are changing, we need to be better, is there the fear reaction or is there more of the, "Yeah, let's partner and let's move forward on this."

0:56:44 Alex Bross
Yeah, yeah, no, there's so many things I wanna say because I do agree with like, what you were just saying is totally true. Like, we're talking a lot about technical skills. People need to do things well in Data Mesh and there's actually like, there's so much more value in just being curious, having a lot of personal agency developing second order thinking and cause and effect. Like all of those things will help you be exceptional at whatever your job is, data or otherwise, right? Just finally replace that for anything that you're working on. For sure. The second piece is, yeah, it's funny this didn't occur to me until you said that. I don't wanna ask that question. Like I don't wanna tell people what's changing and how they need to adapt.

I endeavor for them to self realize that like, oh, things are terrible or they could be better or I'm not being as efficient as I could be. And once you get that realization, it's money day. 'Cause you can cash in on people feeling that way in any way you want to in terms of leveraging their ability to engage now. I've developed credibility with you and so much of the barrier or resistance to change for people boils down to really three central categories, which I think is logic, credibility, and emotion. And I think the first one that's most important with the change we're talking about is emotion for sure. Like we're talking about potentially ownership changing or jobs being different or data engineers moving to software generalists or whatever.

So you have to be at least aware of and able to navigate and manage where people might be in their emotions which is definitely being empathetic in developing social skills. You also have to be credible. And that's where a lot of what we're talking about is that high context data exchange of people talking to each other, right? And having conversations and understanding use cases and being like, man, I get it now, right? Like, walk me through, show me how you do this. Getting that to that level of credibility is huge in terms of just developing a partnership. And the last thing is logic. You just have to show that like, yes, this is a better way to do it. And that's usually where people start. They wanna start with a logic piece of like, how dare you use pivot tables to drive this operational process in bankruptcy?

Like what's wrong with you? You must use this different suite of tools that will abstract all of this for you and therefore be much better. And that's like definitely not gonna influence people. They're just gonna tell you to bug off and go do their thing the way they've always been doing it. And so if you can really develop those first two, you can use logic to your advantage in that case in one day. But I'm trying to get, I guess, people to self-assess that, wow, we do need to change or we want to change more than anything. Not we do, we need to, but we want to. And then we're there to help with a lot of different pathways or bodies of knowledge that we can leverage.

0:59:11 Scott Hirleman
I do agree that no one should ever use pivot tables ever, but that's just 'cause they silently break and I've silently broken them way too many times and not realized it. So I've been burned a few times on that.

0:59:22 Alex Bross
You got it.

0:59:24 Scott Hirleman
But yeah, I think one question I would ask then is let's say somebody's bought into what you're here, right? You're selling that we need to have empathy, we need to train our people, we need to work with them to get them to want this and do this. How would you recommend somebody sell that to management, right? How would you recommend that if somebody is bought in, that they drive the ability to get funding for this and yes, everything's specific to your own circumstances. I'm not asking for the copy paste, but maybe a little bit about your story about doing this or some things that where you think that there's likely to be pushback. Again, you're not trying to hit them with the logic stick and be like, this is why you should do this versus like the credibility in playing to their emotional aspect. I like those three aspects of working with people, but what would you tell somebody if they said, "I wanna do this, but how do I get approval to actually start this data literacy program?"

1:00:39 Alex Bross
Yeah, that's great. I think that this is where knowing the incentives of your audience is really key because like the incentives of my management team they're definitely more of the employee engagement and more of the employee upskilling and collaboration and investment and training. And so for me that was not a huge barrier to crest, it was really just finding the right opportunity, developing the skill set, creating some thoughts around what would be the right way to graduate people through a process like this. I would say that, to me, I would think that you would want to get to a place of knowing what the incentives are. And so if you can identify that the incentives are like, yes, we wanna encourage training or we know there's gonna

be change and we don't know how to get there. And we're facing this decision of like, do we do staff org and professional services to try to fill that gap or do we look at training our own team?

Like that's the right time to sort of strike the flint, I guess. So my own personal story I guess was we were partners, we were in Fifth Third, partnered with an amazing university, University of Cincinnati, which is right in downtown Cincinnati, which is where the headquarters of Fifth Third is. So we play in the same corporate backyard or geographically in the same backyard. And so we do all kinds of partnerships with them around recruiting and staffing and interesting problem case identification and whatnot. And they have this premier innovation center and premier professional development center. And so we've been working a lot on trying to find the right first end-to-end program that we could develop. I happen to have worked on a couple of different sorts of, maybe I'm gonna sound like a one trick pony, but this is just because of my strong belief in employee training not because I've only done one thing in my career successfully. But I've done bootcamps in the past and I found them to be a really exceptional way if you can get the funding to get people to a place of no change to change and a very direct way to manifest that. Rather like what more direct way is there than sitting in a classroom, training skills to people that are willing to change and receptive to that.

And so it was finding the right use case, it was writing a compelling enough business case. So again, I would argue, or I would, one up your perspective on Google things. I Google things every day that I don't know how to do or look for examples of things I can iterate from or borrow holistically. And so trying to find different anchors to any industry research Gartner, Thoughtworks, et cetera, they all come up with different interesting ways to engage a workforce in upskilling. So there's lots of playbooks you can borrow from that give you an ignition guide even to how to do it. But I would say you want to definitely identify the problem you're trying to solve, which is so cliche, but it is so true in terms of like really getting a thoroughly good understood and consumable problem statement will make it so much easier for other people to get on board and help understand where you're going and how to support. And then once you have that, it's just trying to find the right ways that the solution of a bootcamp will help address that or employee reskilling. It doesn't necessarily have to be a bootcamp depending on the context that we're talking about.

1:03:28 Scott Hirleman
Yeah, exactly what you talked about there as well with the business case. I think one thing that a lot of people overlook, especially data people is, it's funny how often you see data influencers or whatever and it's come up on this podcast so much of how much we have to remind ourselves because people in data tend to love technology. You haven't just been talking about tech. I'm sure you do love tech if you're leading

data engineering and stuff. But tying the data strategy to the business strategy or actually starting from the business strategy and creating your data strategy off of your business strategy and then creating your technology strategy off of your data strategy, which is again tied to your business strategy. So much of this is that business case, right?

It's going to somebody. And if you're trying to get funding from the CFO, it's, "Hey, we recognize here's a problem and here is why it's a problem for the business. Not just because I say it's a problem, not just because I say that, but you're going in and it's what a lot of people have said in Data Mesh, of communicating in their language. You're going to them and saying, "I understand that I don't just get to do this," but okay, let's look at our employee retention. If our employee retention is falling, is it because we're not investing enough in our employees? That doesn't mean just going and and doing more pizza parties or whatever that a lot of people try and do or let's redecorate the office versus let's invest in our people, show them we care about them.

Richard Branson's quote of, invest in your people so everybody wants them and everybody wants them to to come to their companies, but they have no desire to leave. Treat them in a way where they don't wanna go anywhere else. I think it's to invest in your people so they can go anywhere and then treat them so they don't want to go anywhere else.

1:05:41 Alex Bross
Right. Right.

1:05:42 Scott Hirleman
And so like a lot of what you're saying here is like showing that there is an actual business problem around this, right? This isn't just, we should be data driven 'cause we should be data driven. It's like, "Okay, go and find that use case where somebody says, we don't get our data for two weeks or we can't trust our data and here's a decision we made and it was wrong because our data wasn't great." Or, I'm spending X amount of my time ensuring that this data is correct. And you know what, 95% of the time it is, 5% of the time it isn't. So I have to spend all of that time to make sure that it isn't in that 5% where it's not. Versus if I could just check some metrics that tell me that it is, then I get to leverage this thing so much more. It's going to improve that there's a business challenge here. 'Cause I think, and why I'm hammering on this is, I think we all know that we need to invest in our people and we need to invest in data literacy if we wanna be data driven, but it's always, well, why can't we just go hire it, right? Like, why do we have to stop down? But you talked about that business case of, well, do I need to go hire 300 data engineers? Can you find that many? Can you afford that many? Versus hey, we're gonna have a quarter where things aren't

going to be as great, but it's gonna pay off over the next four quarters. It's gonna pay off in quarter one and then we're just reaping in pure profit from this in all the future subsequent quarters.

1:07:26 Alex Bross
That's right.

1:07:27 Scott Hirleman
I think so much of what you're talking about is just talking to people like their people and just saying, "What can we do to partner together?" Sorry to be talking so much here, but it's like so much of what you're saying throughout the whole conversation is just not just having empathy. But go in and extract the information and then synthesize it back to them, play it back to them, and then partner with them to say, "And here's how I think we could have a solution. Does this actually hit?" Instead, I'm just gonna pitch you. It's like, hey, let's work together. Let's iterate on this together. Let's play around with this together and take in the feedback and say, "Hey, we found out that doing the SaaS upfront, but the SQL later, that just didn't work very well. Like, we're just gonna move it around. We're gonna do this and here's the output, here's the output, here's the output." So is that kinda what you're seeing is working really well for you or?
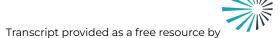
1:08:26 Alex Bross
Yeah, definitely. I interpret that as like, we wanna play catch with people. Like we wanna throw the ball and then have it thrown back to us and understand like, how do we make this better? How do we get more accurate? How do we get more precise? We're not trying to blaze a hundred mile an hour pitches down to a backstop where there's no one receiving it or telling us, giving us feedback on it. And so we're trying to incorporate as much as that as we can. And I just think with the pace of change in general, COVID technology, et cetera, whatever we're talking about displacing so many traditional ways of problem solving that there isn't any other way I think that can be effective. It is as simple as you said, but also difficult to do sometimes, right? To cut through and make it simple and be like, what's the problem? And then, okay, we can probably solve that and not get into the area of like, well, where does this go in the backlog and how do we stack interact this and rank it against all the other strategic priorities and et cetera. That's where you start to lose people because it becomes less real or it becomes more abstract and difficult for people to anchor to for sure.

1:09:22 Scott Hirleman
Well, yeah. And get the buy-in a little bit and say, "Okay, we're gonna figure out how to do this," and then you can start to get into the logistics. But not that you have to have everything solved up front. That's the thing that not a lot of people have with

their Data Mesh journey. We have to solve it all at once.

1:09:38 Alex Bross
Yeah, we made a beautiful Data Mesh strategy or a modern data strategy about a year and a half ago and sat around sniffing our own farts I think for a while and we're like, this is great. People are gonna really align to it and it's gonna be amazing. And then we had some new peers join our staff, and so Sean Maher, you'll appreciate me saying this hopefully to where they were like, well, they joined from a, a consumer line of business. So they were like, this doesn't really make a lot of sense. It's hard for people to like, I don't know what this means, self service means totally different things depending on the business that you're in.

And I saw a recent revision of it and I was blown away. I was like, "Wow, it's so, so different and yet so central to what we were trying to get across, but now it makes sense." Now we've run it through the translation matrix and we've been able to spit it out in a way that can actually be consumable from a line of business that we're looking to try to encourage or adopt that change. And so trying to develop a one size fits all that goes to the absolute maximum of value prop for Data Mesh is gonna appeal to like the one percentile of people that are interested in thinking that way. But you're gonna lose a huge part of the participants you're trying to go after.

1:10:41 Scott Hirleman
Yeah. Yeah. And we keep as well, I think a lot of what what you're talking about is actual human to human contact and we keep trying to iterate away, we keep trying to find technical solutions to communication challenges and we want technical solutions that enable better human to human context exchange instead of the robots are gonna take care of it. I keep seeing this around data contracts and the conversation there, and so much of it is like we have to give producers the ability to understand when they're breaking their sharing agreement and that there is a conversation that is created because it might be that they have to break their sharing agreement and then we talk about versioning and things like that, but a lot of times they just don't know.

And then all of a sudden you say, you now own this, but you have no ability to check if what you're gonna do is gonna break people's downstream consumption or you don't know what's actually happening with your data. And then especially in banking, people get really concerned about, do we share all of our data so anybody can get access at any point? It's like, no, because there's really non-compliant use, but there's also very, very high value compliant use and we just have to know what are you gonna use it for? Like, let's register that. If you use it in a way that's not good, that's on you. We have to have that agreement that you're now saying, contractually, this is how you're gonna do it. And so yeah, I think so much of what you're saying is,

it's funny that it boils down to just like, have empathy, have conversations, work with people, work to understand them, but it is so much about that nitty gritty. Exactly.

You talked about all these, these things that you're doing and the proof points and that you've iterated on them. And that's where, I think, the value in these types of conversations are, is that it's not just, here's the abstract, you made it concrete for people, that's where I think these are to me, incredibly helpful because it shows people like where you iterated, how you made changes and stuff. So I learned a lot from this. I'm very excited to absorb it and I'm sure I'll come back to you with more questions later, but so we did cover a whole heck of a lot of things throughout this. Is there anything we didn't cover that you wanted to, or any way you'd kind of wanna sum up the conversation in general?

1:13:21 Alex Bross

Yeah, I would say no, I love where this went as well, so thanks. I definitely reciprocate that. From my perspective, I feel like we're definitely pushing the boundaries of implementing a Data Mesh and trying to figure out where though, like I said, those holes in the Swiss cheese are. So the one thing I'll say is, where the thing that we're talking about with employee reskilling and organizational change management on the data consumer side primarily, but a lot on the producer side as well. You do need energy input into the system a little bit upfront. You do need to have people, a team that's dedicated to picking things up when they fall over because, we have this really weird phenomenon that occurs in financial industry where it seems to me that the pace of change or an organizational change will end when a PowerPoint is given. Whatever, some milestone like that is met, but like no change has actually occurred.

So you have to be willing to pardon the pun right now, but whether the storm of that kind of change fatigue where things are gonna fall over and it does come down to an individual potentially pushing it forward and being like, you know what? We gotta pick this back up. Let's remind people, let's re engage, let's be the one that's annoying people about, hey, this is coming up. Who do you have that you wanna be involved or kind of hitting that bell over and over again. And that's where we see time and time again, that personal agency, that ability to stay curious. That stuff pays off big time when you're trying to actually influence and and work through change even when you don't have potentially a lot of organizational authority. Like my title gives me some of that off the bat, but if you're in a situation where you don't have that you can be very energetic about the change and you can usually get enough people on board with you to keep it moving forward.

So I would say, yeah, and then I would just say that for us, the key to unlocking Data Mesh has certainly been upskilling. So I would just hit that drum again and then be aware. Here's my cautionary tale. Be aware of downstream reporting. If you're in an

area where you have lots of change that you're incurring or lots of disruption that's occurring, definitely make sure you're engaging those data consumers early and often. I'm sure Scott, you've got a few of these where you've had one, what seems to be minor systemic change occur in a new source system or a replatforming initiative or even just an upgrade that has major consequences downstream that can hold everything up. So if you have a group of downstream consumers, and if I say that there's probably a group that may come to mind, definitely make sure you're engaging them and you can be aware that they're gonna be a really good, interesting, valuable group. Generally speaking, if you can get your downstream reporting group to come along with your change initiative, the world will follow. I like to think.

1:16:01 Scott Hirleman
Well, and that was kind of the conversation question earlier about like, how far do we go? There's ownership, but then there's also knowledge and information and we need that in the platform as well so that producers can actually know who this might impact and have that conversation.

1:16:19 Alex Bross
For sure.

1:16:20 Scott Hirleman
So I'm sure there's gonna be a lot of people that would love to follow up with you on kind of everything we talked about here, where's the best place, what would you like them following up if on anything specific?

1:16:32 Alex Bross
Yep. Yeah, perfect. So LinkedIn is probably the best way. I'm one of those people that I don't have much social media. You can find my wife on Facebook, but she'd probably get annoyed with data questions, so definitely don't do that. But you can find me on LinkedIn for sure. I'm generally pretty responsive on there, unless you're a recruiter or something, then I'm generally not responsive. But yeah, that's definitely the place to be. I'm happy to answer questions. I love clearly, hopefully some of the passions coming through. I love talking about people, leadership change, data for sure. Anything in that realm, I'm happy to be participants to.

1:17:02 Scott Hirleman
Yeah. Awesome. Well, again, thank you so much Alex for your time today and thank you as well. Everyone out there for listening.

1:17:09 Alex Bross
Cool. Thanks Scott.

1:17:11 Scott Hirleman
I'd again like to thank my guest today, Alex Bross, who's the VP of Data Engineering at Fifth Third Bank. You can find a link to his LinkedIn in these show notes as per usual. Thank you. Thanks everyone for listening to another great guest on the Data Mesh Learning Podcast. Thanks again to our sponsors, especially DataStax who actually pays for me full time to help out the Data Mesh community. If you're looking for a scalable, extremely cost efficient multi data center, multi-cloud database offering and/or an easy to scale data streaming offering, check DataStax out. There's a link in the show notes. If you wanna get in touch with me, there's links in the show notes to go ahead and reach out. I would love to hear more about what you're doing with Data Mesh and how I can be helpful. So please do reach out and let me know as well as if you'd like to be a guest, check out the show notes for more information. Thanks so much.