036 - Art of Engineering - Kirsta Scranton

Transcript:

Denise:

Welcome to the Art of Engineering podcast, and today I have as a guest, Kirsta Scranton, who is a senior construction project manager for the University of Iowa. And our, our relationship goes back several years because we have worked together to complete a large project, which has turned out to be a contract manufacturing site for the University of Iowa's Pharmacy School. And started as a new building and it's now operational and there's actually product being produced. So Kirsta, welcome. And this has been a long time coming, but, but I have talked with you several times about two things we wanted to do when this was finalized, and that's one to have a conversation on the record about the project. And number two, to have an offsite off the record conversation to follow. So we're beginning with this one. So tell me about what you do as a contract construction manager and how you got to this.

Kirsta:

Well, Denise, it has been a long time coming, hasn't this? I have been in the construction in industry for almost 30 years now. I got into this industry by mistake kind of sorta in high school I liked numbers and I liked science, and I was given the opportunity to go job shadow an accountant, because it was between an accountant and an engineer. And I watched what an accountant did and I said, no way,

Denise:

Not all day, every day.

Kirsta:

No, no. So I then knew that I was gonna go to Iowa State University and be in engineering. Now, at that time, I had no idea what engineering field I wanted to go into. I always thought a chemical engineer would be really cool. And then I took chemistry and I decided that this probably wasn't for me. And I found my way into civil construction engineering. And the thing I loved about construction engineering is I have lots of numbers to work with, and I get to go outside and go to the job sites and help solve the problems there. So I, I say I found it by mistake, and there may have been a smidge too much drinking in college my first couple years, And the GPA requirements for construction engineering were lower than the rest. So, you know, wow. You know, things happen for a reason and I, they do, I love being in the construction industry.

Denise:

So, were any of your family, any

Kirsta:

My family would, would, was, did a lot of things with their hands. My dad was a telecommunication engineer and he installed some of the first fiber optics for Rockwell Collins. And so didn't understand what that all meant. But we did things around the house. We did a lot of remodels, we did a lot of things ourself. So I was always helping my uncle remodel his house when he'd buy them. So I kind of got into it, and my mom would be the one who take on the projects to, and would get her hands dirty to figure them out.

Denise:

Aha. So no fear there.

Kirsta:

No fear.

Denise:

So I did see on social media the, the other day that you had tackled the bathroom project, I believe.

Kirsta:

Oh, God, yes yes. I'm all for DIY, but please know what you're doing.

Denise:

Oh, well, speaking of knowing what, what, what we're doing. So just to get a little more background about how Kista and, and we got acquainted, is that this project involved our company as Integrated Containment Systems, essentially managing several vendors to put an entire system together.

Kirsta:

Yes.

Denise:

And Kista, thank you was such a great guide and calls a spade a spade when a spade needs to be called a spade, but respectful and helpful and Wow. And, and worked with us from beginning to end.

Kirsta:

Yes. I, I, I came in when you guys were at your, like, revision “f” on your proposal. Yes, yes. And took the ball running. And I appreciate your kind words, though. Sometimes they're hard to hear. Oh. Because I, I might be known as a hard-ass quite a bit of the time. Well,

Denise:

To me, that probably just comes with the job because when I think about the process we went through and I mean, it's, it's more than herding cats. 'cause Some of these cats were a little hard to corner. Yeah. I So, and this is not the only project you work on No. And have worked on

Kirsta:

That is correct. So as an owner's representative for construction at, at the University of Iowa, we have numerous jobs running at the same time.

Denise:

I know that as we were finishing up, you were working on a new hospital. Yes. And it's,

Kirsta:

Yes. And it's done, done. I know. There may have been some bets that the hospital had finished before we get this project done, but we took care of that. We finished up the pharmaceutical line before the hospital got done, so I feel good about that. Yes.

Denise:

And tell me what you're working on now.

Kirsta:

What am I working on now? I have a handful of projects. I have an old Museum of Art building that we're renovating into dance recitals for the, for the College of Dance. And then I have an old art building where we had some Grantwood Studios at when he was here, that we are converting into a Maker's a maker's lab where they, where they can collaborate together with different art projects. And there'll be the graduate program in the building and a few other things. Wow. And I have a few other projects that are in design that I can't quite talk about yet, but they're keeping us busy.

Denise:

So you've been here at the university for 16?

Kirsta:

16 years. 16 years.

Denise:

And how did, where were you prior to?

Kirsta:

So, so prior to here I worked for Turner Construction Company. I was out in Portland, Oregon. I loved the West Coast. And it was 2009. And in 2009, the construction industry on the west coast tanked. Completely. 80% of staff was laid off. And I was one of that 80%. And I interviewed and I

had job offers contingent on them getting a job. You know, if they wanted job, I would have a job. And so I found myself still laid off in five months. And I remember sitting here going, okay, it's time to put my house on the market. Okay. And at that time, my mom had sent me a, a job listing for the University of Iowa Uhhuh. And I was dead set about never coming back to Iowa. I didn't say never 'cause I learned that lesson a long time ago. You never say you wanna go back somewhere because Right. You go back there.

Denise:

Yeah.

Kirsta:

And so I found, I found myself getting a job interview and, and it was an, it was an phone interview with four people and I thought it was my worst interview ever. 'cause They were asking questions and it was four people. And I just, it was intense. It was intense. Intense. And so then they sent me a bunch of listing questions to, they had to write answers to. And I sent that in. And as I'm packing up the card to head home to Iowa to drop my animals off. 'cause If I'm to sell my house mm-hmm. We're just gonna ship the animals off to mom and. I get a call that they wanna have an in-person interview with me. So I'm like, cool. Okay. And I remember calling my mom back up and I'm saying, okay, I have a second interview. You are not allowed to be excited for me because I don't wanna live in Iowa. So if I get this job, do not tell me you're excited because I'm not.

So I have the interview and I came back here and I don't remember if I had the offer at the time or if I didn't. And I believe that things happen for a reason. And I remember sitting there saying, okay, God, if I'm to get this job in Iowa and take this job in Iowa, I need to give you a clear, you need to gimme a clear sign that I cannot misinterpret at all. No room for Kirsten to say, oh, is it, is it not? Is it not? So I was going into Ikea to buy a couple things to stage for my house. And the song, isn't it, I Ironic by Alanis Morissette was playing overhead. I'm like, I like the song. And 'cause I had said this prayer in the parking lot of Ikea. Because I, I think I might have had the offer. And I walk in and I go to grab something and I run into a lady and I bump into her and she's wearing Hawkeye. I will Hawkeye gear.

So I said, thank you, God. The sign is clear. And so next thing I knew I was starting the job here after Labor Day in 2009. And I was living with my mom at the time. 'cause I'm trying to sell a house in Portland. I've been laid off. And it was, it was kind of messy. But, you know, I couldn't figure out why I was back in Iowa. And after being home for two months, living with my mom, my mom unexpectedly died. I never would've had that time with her. Oh my. If I hadn't have been laid off and living in Iowa with her. So with her, so things I think happened for a reason, even if we can't figure it out, because I don't think I ever would've left Turner unless I was laid off. Yes. Or come back to Iowa. Or come back to Iowa. Yeah. Wow. You know, and, and then that two, two months, you know, there's so many things with your parents that you have to work out. And we were able to work out a lot of those. I know. Special. It is

Denise:

Very special. Oh, gives me the chills. Yeah. And and you're still here.

Kirsta:

And I'm still here. I know.

Denise:

So you've been in this long enough. How have you seen, and and you and I have both been in industries where women weren't exactly at the forefront. What have you seen that's changed over a period of time or gotten better or, or we've made better?

Kirsta:

Well, I think some of the big things is technology. Let's just talk about that. Okay. When I first started you had a job site secretary on the job that would had the only computer or maybe two computers. 'cause The project manager had 'em. And you would have to hand write out your letters.

Denise:

Oh my

Kirsta:

And then they would type your letters and mail them off for you. So you didn't even have a computer to do your work. It was wonderful.

And then a few years later when I was working in Puria, Illinois, you had to ask people to buy a fax machine so you could fax them documents. Okay. Because that was the new fast way to do things.

Denise:

I remember those.

Kirsta:

I know

Kirsta:

And so now we have phones, we have computers in our hands and phones and everybody is

Denise:

More on the level.

Kirsta:

More on the level. Yeah.

Denise:

Hadn't thought of that. Yeah. Yes.

Kirsta:

I mean, now you're like, you don't even have to do a fax machine

Denise:

And we can text Yes. And we can.

Kirsta:

Yeah. Yeah. And so yes, there's good and bad things to that. I mean, you're on, you're working all the time now it seems like. Right,

Denise:

Right.

Kirsta:

You don't have that. I don't have a phone. You can't, I don't have a mobile phone. You can't call me. Yeah.

Denise:

Yeah. Interesting. Yeah. So mentors along the way

Kirsta:

I've had some good mentors that I've worked with. Unfortunately most of them have been male.

Denise:

Well, because,

Kirsta:

Because it's a male dominated industry. Yes. And yet, when I started in the industry, I don't think women did a good job helping other women. It was much more I'm competition.

Denise:

I, I think I agree. And I I would tend to agree with you. And do you think it was because there were so few of us?

Kirsta:

I think so. I think so. That

Denise:

It, that it was more competitive than collaborative.

Kirsta:

Yes. And I think that they had to fight to get where they're at. Yes. And turning off that fight is hard.

Denise:

It's very hard.

Kirsta:

Yeah. Yeah.

Denise:

So my mentors were men.

Kirsta:

Yeah.

Denise:

Yeah. One of them in Farmville, Iowa.

Kirsta:

Oh, that's funny.

Denise:

Well, I had interviewed for a job with Farmland Industries, and this was when I was in the ag field, and he was the manager of one of the best cooperatives in Iowa. Yeah. Urban Kenobi. And when I interviewed, he, he, I just happened to be calling on him and he said, that job is not for you. And I said, but it would be a better paying job and it would be all these things. And he said, it's not for you. So I said, why? He said, because you have a mind of your own and you don't hesitate to express it and it won't fit there. And I had to go back to my car and go, wow. Okay. But he was so Right. But one of, but he was one who encouraged me at every turn to keep doing my job and keep being better and Yeah.

Kirsta:

Yeah.

Denise:

They're out there.

Kirsta:

They are.

Denise:

So have you had an opportunity to mentor

Kirsta:

Yes. On different levels. I have found myself being a mentor through Big Brothers and Big Sisters. So I've done a lot with children at work. Sometimes I think I'm too bossy to be a good mentor. That's hard. You know, I, I have on this hospital project that I'm just finishing up I've worked with more women than I ever have. Really? Yes, yes.

Denise:

And are they, so in what capacities?

Kirsta:

So they worked for the, for the construction manager at risk. There was also women, you know, like in architectural fields in some of those other fields. Okay. And and some of the engineers as well, and the women are, were younger than me mm-hmm <affirmative>. And I think for the first time I realized that how I present myself shows these women how they can do what I do. And I think, for lack of better words, I felt like I was less combative than I normally am on a job. And that's, that makes me sound like I'm brutal. But if you ask , if you ask,

Denise:

I never found you to be brutal.

Kirsta:

But if you ask the guys I work with, I guess I make them cry, so , whatever. But, but Denise, you don't see it as brutal, probably because you're another female. Well,

Kirsta:

You know, I think you take your strengths and you see them. I, I, yeah. I downplay my strengths. I yeah.

Denise:

Yeah. But well, some, it's, some of it is how we get along.

Kirsta:

Yeah, it is.

Denise:

Yeah.

Would you encourage, so one of the things that we see happening in at least the pharmaceutical world, is there's tons of pharmaceutical manufacturing, new sites that have been announced to be built over the next three or four years. Would you encourage young people to a, get into this field, whether they they're male or female and what are the opportunities?

Kirsta:

I would encourage people to get into this field. You are always learning new things. There's never a day that repeats itself. I like the challenges and I like solving problems. And every day is a different problem. It's not the same. And I like that. I also think that what we do makes such a difference in people's lives when it's done and built.

Denise:

Well, and you're on, you're here so you can actually see that.

Kirsta:

Yes. Yes. I can see, like at the pharmaceutical manufacturing line at the College of Pharmacy, how since their contract manufacturing that they get to run these small test batches for trials and that one trial medication might make the difference and

Denise:

Whatever life and death. Yes. Yes. And

Kirsta:

The fact that I helped put that system in place means that I'm helping make the world a better place.

Denise:

Well, and that's how we feel about it too. And, and on Thursday, well, I get to go tour it again tomorrow with some people of our group

Kirsta:

Fantastic.

Denise:

And then on Thursday, I get to meet with the business development folks to talk about doing some joint promotion of what the capabilities are and who's looking for those.

Kirsta:

Oh, what a great way to help each other.

Denise:

Well, just struck me that it just would be a, a fun experience, but b what is here is special.

Kirsta:

Yes.

Denise:

I mean, it's, it's like one of a kind in this country.

Kirsta:

Yes.

Denise:

And and we need to let people know it's here.

Kirsta:

Yeah. I remember sitting in those meetings and they're like, well, what are you gonna make? And they're like, we don't know. We have to be able to make whatever we're asked to make. And we're like, but I guess you're right. We're not just mass producing insulin or whatever other medication that they're looking for. Yeah. We're, we're trying to get the, the trial runs ready for

Denise:

Well, and the university being this research university. I mean, to me, it's just such a great collaboration of being able to work with those companies and those researchers who are on the leading edge of that next cure. And there are 14 configurations of what they could do with the equipment.

Kirsta:

Yes.

Denise:

So it's gonna be a fun ride now that we have it ready

Kirsta:

I, I agree.

Denise:

So of all the things you've done in all of these years, you've done this. What's one project or one seemingly insurmountable thing that you made go away. Besides us?

Kirsta:

I wasn't gonna say that. Denise

Denise:

Beat you to it.

Kirsta:

You did. I am struggling with this question.

Denise:

Well, you've seen a lot of, you've seen a lot of projects.

Kirsta:

Yes.

Denise:

And a lot of, so I, so one of the things that I'm wondering about is what, in terms of how buildings are put together, this, in this day and age, how has that changed from say, the just stick building to maybe putting a hospital together today where the rooms are essentially cookie cutter rooms?

Kirsta:

Yes. We try to make 'em as cookie cutters. They can, because the more cookie cutter they are, the more efficient we can build them. I think the biggest difference is the amount of technology that we have to put into these spaces to make them work.

Denise:

So technology in terms of

Kirsta:

Equipment, like medical equipment. Okay. So they want, as you're aware, I mean, by the time we got the line built for pharmaceuticals, some of the, some of those were outdated technologies. And so the difference between that and the hospital is, is we had to buy you up front to get you going. Now we could get told they're gonna get an X-ray or an MRI machine, and, but they don't buy it until the apps until the, the latest date. Okay. So then things could change the technology changes. So maybe your electrical, mechanical weapons change and your data changes, and as you're already building it. So you're trying to work through those issues to make it as specific as you can, but allow the flexibility for growth.

Denise:

Okay. So in terms of, I read a book that I have brought to you because I, I wish the guy had written it before we started, but it is how big things get built. And he talks about how they were able to build the Empire State Building in under budget and, and beat the schedule. And it's

because they built every floor one at a time and is built on top and built on top and built on top. And we are seeing on the, on the pharmaceutical side, some of the clean rooms and those kinds of things that are being built as modulars. So they build them off site and then they set 'em in. So are you seeing some of that?

Kirsta:

Yes, we are seeing some prefab, yes. And, and I think you, you, we will see more prefab the, the, the more repetitive a building is. So the more rooms that are the same, the more you can prefab it and the, the, the faster you will go.

Denise:

Okay. So you're redoing some buildings now? Yes. Is it easier to redo a building or start from scratch?

Kirsta:

I, starting from scratch I think is, is simpler because you can plan how you're gonna attack the building from out of the ground to completion. And you're, you're in a lot more control of how the details go in on a renovation. You're going in there and you're opening up walls and you're going, oh, my, oh,

…or you're working in a building that's a hundred years old and you're like, this is phenomenal in how they built this based on what they knew. And now it's been standing for all these years and it's, you're in awe. Yeah.

Denise:

So the Grant Wood space. The, the artist, yeah. I didn't, I did not realize was here at the University of Iowa. Yes. How old is that building?

Kirsta:

1930S?

Denise:

So almost a hundred. Almost

Kirsta:

Almost a hundred. And it's all clay block.

Denise:

Wow.

Kirsta:

I know. I know. And then, you know, the clay block, they have, they have holes through them, and of course they have to stack the holes every other way. So you're like, whoa, you're not getting conduit down those…

Denise:

Right. Right. So, so how do you do that?

Kirsta:

Sometimes we have to chip it out and put it in, or we're going build another well in front of it to, to get it

And then you're working on details. Like they have these intricate steel windows that we're replacing because they're almost a hundred years old. Right. And you start taking 'em apart and you find out there's asbestos. And so, oh. And then the way they built the windows is we're getting into the brick. Similar. So I, I like helping orchestrate how we solve those problems.

Denise:

That's what you do.

Kirsta:

Solve problems. Solve problems.

Denise:

So, a day in the life of Kirsta.

Kirsta:

Yes.

Denise:

What does that look like?

Kirsta:

Chaos.

Denise:

I wanna say you thrive on that.

Kirsta:

I do. I kind of like it. I get excited about chaos and when there's not enough, I cause it that keeps me. Okay. And that gets me in trouble. And I need to stop that

On a day in the lie. I would say that I depends on the day. Typical I get up, go to work get my Pilates in, get a teenage boy out of the house to go to school or to go to work, and then I come back home and sometimes I veg on the couch and do absolutely nothing. I've got little projects going on that I'm working on, and I doodle with those. And

Denise:

So it brings you joy.

Kirsta:

I love Pilates. I, I, I, I found that three years ago and it's been the best thing for me. And I love being outside gardening.

Denise:

Mm. Me too.

Kirsta:

And listening to my son laugh, even if I don't understand their sense of humor. I, I love hearing him laugh and talk with his friend.

Denise:

Good. And he's 16, I think he's 16 driving.

Kirsta:

Yes. He's at driver's ed right now.

I've only had to hit my imaginary break a few times.

Denise:

I still, I still have one of those, the guy I drive with isn't 16 though. Oh, wow. Anything else you'd like to share about who you are and what you do and what this journey looked like?

Kirsta:

I, I think I was surprised by this journey. As a woman in engineering and in a very male dominated industry I think I had to put on a lot of masks. And I feel like I've lost who I really am at work. So I feel like I'm one person at work and outside of work, I'm a different person because of the masks and, and that. And then when you get that label of who you are. Even if you're not that way, you still live up to it. So I have found that I'm trying to rediscover who I am and be more authentic with who I am.

Denise:

That's a good journey.

Kirsta:

It is. But it's hard.

Denise:

It is hard. Yes. And I, and I agree. The 'cause my first 30 years were in agriculture as one of the few, one of the few women.

Kirsta:

And that must have been hard for you.

Denise:

Well, and yet, you know, I look back, I wouldn't change a thing.

Kirsta:

I agree. I think there would be a few things that I would change. I think I would find a way to be more inclusive with other women I worked with.

Denise:

Yes. Well, they were kind of hard to find. They were in the early years. No,

Kirsta:

I, I agree. I agree. I I know.

Denise:

And here we are. We still have time. We do. And that's one of the reasons I started doing this podcast after they finally convinced me it wasn't that scary. 'cause I said, I'd listened to Terry Gross for years, and who could who could outdo that woman. But, but part of this journey has been having these conversations with women who have come a long way. Yeah. And, and to encourage each other to be that authentic self and reach out and encourage others.

Kirsta:

Thank you for doing that.

Denise:

Well, and I think we just need to lift the whole, you know, in the last 40 years we've kind of lost the middle class. And I think being able to expose these kinds of jobs to people who may not even know they exist and that they're open for all of us. Yes. That's just reaching out and finding somebody to talk to about them, or being introduced on a podcast about what it is, about herding cats every day.

Kirsta:

Yes.

Denise:

So, Kirsta, thank you for joining me, and thank you for being your positive patient self for all this time.

Kirsta:

Thank you, Denise. I am glad we finally finished this. You, you know, that was somebody, you know, the consultant, we have the pharmaceuticals consultant on the job. When you're talking about this process of getting to qualification, he's like, yeah, it could go really well and you'd be done in like six months, or, or it could take years. And I'm like, what? How the hell is that gonna take years? There's a plan. Work the plan. And I, I understand.

Denise:

Now we understand.

Kirsta:

Yes, we do. And yet here we are

Denise:

We are and, and we're celebrating.

Thank you for joining us again on the Art of Engineering. I'd love it if you would share this episode with others in our industry and encourage them to subscribe wherever they get podcasts. In the meantime, we'd appreciate your five star review and would love to hear any comments or suggestions. Until next time, I'm Denise McIntosh from Custom Powder Systems online at custom-powder.com.

Quotes

“I would encourage people to get into this field. You are always learning new things. There's never a day that repeats itself. I like the challenges and I like solving problems. And every day is a different problem. It's not the same.” - Kirsta Scranton

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