

Voices of Sustainability: Season 1, Episode #5

Phillip Schlies

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Intro

Hello and welcome, I'm Phillip Schlies and you are listening to the Voices of Sustainability Podcast. Join us as we delve into the various strategies and challenges faced by the government, businesses, and non-profits, all striving to balance economic growth with environmental and social responsibility.

This season from the University of South Carolina, our reporters are all business majors at the Darla Moore School of Business with a concentration in sustainability. They'll be talking with various organizations to highlight how they're working to improve the world we live in and conserve our natural resources.

To explore the topic of sustainability, the episodes will explore how each person being interviewed defines sustainability, how the success of sustainability initiatives are measured in their organization, the motivations to be sustainable, and how to have a positive impact in your career. The conversations also provide insights into topics such as, circular economy and recycling, innovation and technology in sustainability, as well as regulation and policy that are influencing this space.

On today's episode, our reporter Natalia Berti will be speaking with the CEO of Delta Bravo AI, Rick Oppedisano. Delta Bravo AI is a company dedicated to helping businesses improve their efficiency and output through the use of artificial intelligence. We'll dive into Rick's experience, AI's place in sustainability, and the demands that come with making an impact. Let's get into it.

Script

Natalia Berti

Hi, my name is Natalia Berti, and I'm a junior studying in the Darla Moore School of Business. On this episode, we will be learning from the insight of Rick Oppedisano, the founder and CEO of Delta Bravo AI, let's get to know his story.

Rick Oppedisano

Alright, so my name is Rick Oppedisano. I'm the founder and CEO of Delta Bravo Artificial Intelligence. We're based up here in South Carolina in Fort Mill, so about 15-20 minutes South of Charlotte. So its at the highest point of upstate. I started with the company about eight years ago with the goal of restoring leadership to American manufacturing and civil infrastructure. So

when we step back and take a look at manufacturing in civil infrastructure, I believe that these things represent the best of humanity. 100 years ago people were starving, right? who had access to clean power? Clean water, right? So if you look at the last 100 years and you see all those advancements that we've made as a society, manufacturing and civil infrastructure are the things that propel that. Recognizing that, about eight years ago, we started to see that there was a developing problem in both of these areas, a number of experienced older generation workers retiring and leaving. We saw the great resignation start to happen and so ultimately the result was that these businesses, these manufacturers, these water systems, these energy systems, they lost great employees and the new employees that were coming in, not to say that they weren't great, but they learned differently. The previous generations, if you gave guys like me a 3 ring binder that's that thick full of specs and information I will read it. Folks your age are going to look at that and say, well, that's a nice paperweight. Let's get started. So when that happens, there's a learning curve and in manufacturing that learning curve expresses itself in poor quality and additional waste and things like that because the employees just don't have that experience and that skill set and that perspective to make the right choices. So what we're doing is we've created an AI platform that allows us to take all the data that's being produced in these environments and turn them into AI copilots that bridge that gap. Instead of having to read the three ring binder, that's that thick, you have real time information presented to you in a way that gives you exactly what you need to make the right choice right now. And so it's made a big difference for our customers. We helped Rolls Royce reduce their defects in engines by 90%. We've worked in Nucor Steel to reduce steel scrap in a huge way to help them meet sustainability goals. We've worked with AccuWeather to help them predict the weather more accurately. So we've done some really cool things like I said in manufacturing and we were just granted and National Science Foundation award to actually help rural water systems improve quality and equipment reliability. So, our whole mission here is to improve the lives and communities and the businesses that help propel society forward.

Natalia Berti

So when you were talking about helping other companies maintain and improve their sustainability goals, overall when I say sustainability, what does that mean to you, in a general sense?

Rick Oppedisano

So, in my world, what that means is maintaining high standards of quality and production while using less hazardous or raw materials in producing less waste in the process. So maybe a little bit differently than the way that it's looked at broadly, I just use the lens based on the stuff that we do, right? So in our perspective, for example, like a you know, water system, if we can produce high quality water with less chlorine. That's a cost saver for them, and it's a, you know, environmental improvement for that system. Right? With Nucor, we're helping them bring you know, we this is actually a really interesting story. So that Nucor plant that we work with Nucor Steel, so they are actually responsible for 3% of the state of South Carolina. Entire state's energy use 3% comes from this plant. And so by improving their quality and their processes with AI, we allow them to reduce something called rework. So if you make 100 objects and only 90 of them

turn out good, you've got to remake those 10 right in order to meet the order. So you know, if you've got to remake those 10 you've got to use more chemicals, more energy, more water, right? So with the Nucor, what we did is we improved their processes in a way that dramatically reduced rework, allowing them to use less energy and less chemicals to make the same high quality product. So again, if you're able to reduce somebody's energy use by three to 5% and that person's responsible for 3% of the entire state of South Carolina's energy use. It's pretty big win. Pretty big sustainability gain there.

Natalia Berti

I feel like a lot of times people don't realize that it's the big energy companies that can really like make differences with how they go about sustainability and being more efficient in the way.

Rick Oppedisano

Yeah, manufacturing is a really good spot for this. Just because when you step back and take a look at the amount of energy, the amount of water, the amount of heat, not to mention electricity that's required to support these processes, especially if it's a 24/7 operation, right? There's that the running all the time.

Natalia Berti

So my next question is what motivates you to continue pursuing sustainability in your company?

Rick Oppedisano

For me it's less about me and it's really more about my kids. You know I have 15 year old twin daughters and I want the world to be a better place for them. I want them to understand that the way that things have been run from this perspective is not the way that they need to continue to run. I do think that there are different metrics that could be used to better measure and manage ESG initiatives. I'm not sure if carbon footprint is really the right metric. But I do feel that having the idea of reducing waste, reducing usage, reducing the general business footprint as it pertains to that type of thing, I think that's a great idea. I think that the idea of being more energy efficient is always a great idea. I just want to make sure that you know, number one, we continue to keep these businesses operating efficiently for today's economy and also for tomorrow, for folks like you.

Natalia Berti

So when you were talking about kind of finding the best metric, are there any challenges you see businesses having to overcome with tackling different sustainability initiatives and like what metric to choose?

Rick Oppedisano

Yeah. There's two conversations there, one being the upper level metrics around ESG and things like that. And it's a much longer conversation and it's probably way less interesting than the second part of the question, which is, hey what are people really doing? And where do we see the process kind of fall off? So what I can tell you is that in the last couple of years, a lot of

manufacturers have invested in hiring folks in sustainability. And so you'll see that all of a sudden there's a sustainability VP and the sustainability team. So the first thing that those folks tend to do is still going to the plant and they'll install LED lighting, they'll install motion detectors. They'll install all the basic things that are just very like low level quick fixes for, you know, gradually reducing an energy bill. Then after that they say, well, what else can we do? And this is where it gets confusing. This is where it gets really hard because once you get past those things that are just kind of easy like LEDs and motion sensors, once you get past that now you have to get into the operation. You have to figure out how the manufacturing process itself can use less chemicals or less water. Or like that's, you know, less energy, right? And that's super hard because the value of a manufacturing company is its process. So that's where all the value in any manufacturer is and what will happen is when it's some sustainability person comes in there and says, hey, you know, you got to reduce your energy usage and they say this to a plant manager that is struggling to make basic numbers, that's been juggling new hires and people leaving and new suppliers, they're like, that is the last thing they want to hear. Right, so I think that there's a huge opportunity for sustainability folks that decide that they wanna be more become more part of the process. If the sustainability person goes in there and really just sells out to understand that manufacturing process. Understand this thing, get in there, live it. See if there's an opportunity for you to improve the process from the inside out, not from the outside in. There's a lot of different ways that can happen. I talked about Nucor, that being one idea, but another idea like that we that we did with the Rolls Royce was predicting engine failures before they happened that reduced energy usage because they didn't have to go back and remake things again, right? So I think that there's a huge opportunity for sustainability folks if they align themselves with process people and quality people.

Natalia Berti

So you talked about how different companies have sustainability teams and Sustainability Vice Presidents, is there any way that you guys measure sustainability whether or not if it's through a team or anything like that?

Rick Oppedisano

Yeah. So we focus on quality as our #1 sustainability metric. So if you think about a manufacturer, the way the business model works is very simple. It's all about #1 is cost per unit. If we can reduce cost per unit, that's awesome. That's where we wanna be. That means it will be more profitable. So the way you do that is that you improve quality, right? So you do rework if you improve quality. That includes improves throughput, meaning you can make more. You can make more units faster at a less cost. And that's really what you want to do. So we look at that and say, OK, how can we measure this as a function of sustainability? If we can improve throughput, right? So making more units with less waste, that means we are more energy efficient. That means we are more chemically efficient and we're more time efficient. These are the three things that we use to measure back. And if we report back to a quality person or a sustainability person, we make sure that we're able to align our metrics with their metrics.

Natalia Berti

In general, not necessarily sustainability related, How do you measure your companies overall success on long term and short term basis?

Rick Oppedisano

Yeah. So the long term success metric for us is being able to get out there and leave our mark on the market. Alright, so this is what we're going for. This is not like a three to five year thing. This is what I'm gonna be doing for the rest of my career. We have an 8 to 10 year road map. You know, we're looking at from here, if not more where we want to change the way manufacturers work. We want to restore leadership to American manufacturing and to civil infrastructure through the use of AI. We want to change this whole thing. We're going to make it better, all right? And so when we think about, you know, what type of metrics or what type of you know, I guess you could say kind of just guideposts. Do we see along that way? We hear it in our clients voices. I had a general manager of a plant call me up two weeks ago and he said, hey, we were thinking about doing layoffs because the quality problems we were having are costing us so much money and over the course of about six months, our work with them put them in a position to essentially eliminate about 80% of those quality problems. And they came back and said, hey, we we might have done a layoff if it wasn't for that. So that's a huge thing for me. It's, you know, keeping jobs, and then the other side of it too is just, you know, in the end, how do you take a look at the families that you effect? So it's one thing to make sure you know and that's awesome to hear that we helped keep families employed. That's awesome, but what about the families that work for us? The folks that have trusted people like me and my management team to with their careers. So just want to make sure that the people that have trusted us know that we're serious about it. They see that we're keeping our end of the deal, we're giving them challenging fun work. We're helping them feel great about what they tell their kids they do for a living. Think about it, if you're gonna be away from your family and your children for 8 to 10 hours a day It better be for something good, right? That's really that's a big thing that I look at personally as a leader is am I keeping the promises, not just to the market, into the customers, but am I keeping those promises to my employees, to my shareholders, to my board, we are on a journey together and it's a journey of purpose and fulfillment. Do they still feel that way? And that's something I check in on as often as I can.

Natalia Berti

So this will be the last question. If you're able to give me just one piece of advice for students to have an impact on their career, what would it be?

Rick Oppedisano

All right. I'm gonna come out and say it. Be tougher. OK, understand that happiness and success is a function of discipline and sacrifice. Just when you get out just because things aren't exactly the way you thought they would be, or that you wanted them to be, it doesn't mean that it can't happen. You have to put some skin in the game. You got to get your hands dirty. You have to sacrifice. You have to learn. You have to put, you know, people talk about work life balance

when you're young that's out the window. It's work balance alright and so you have to be able to accept that if you want to be a successful. Now, if you just want to have a job or you just blend in and you're just a salaried employee, you can enjoy the slavery of the W2 all right? Because ultimately you're just a middle man. You're a cog in the machine and that's all you want to be. Then focus on work life balance when you're in your 20s. If you want to be something more than that, be ready to sacrifice. Know that you have to go get it and have that mentality and have the people around you see that mentality and feel it right? They just got to know that you were there to win. A lot of younger folks they are not as self guided in your generation as they were in mine. They kind of they want people to guide them. They want people to kind of tell them what to do. I would say the best advice I could give you is just get in there and start breaking things. Work hard, have fun. Be agreeable. Say yes to everything. Do the jobs that nobody else wants to do get a reputation for being a doer.

Natalia Berti

Thank you so much. And that will conclude our interview. Thank you so much for participating and it was so amazing to hear all your responses.

Outro

Thanks for tuning in. I hope you've enjoyed getting to know Rick and learning more about Delta Bravo AI. It's exciting to see the positive use of artificial intelligence and its ability to become a tool for sustainability, as well as Rick's Journey through it all. However, that's all the time we have today. Tune in next episode to hear our guest from Trane Technologies talk about climate solutions for businesses and how they can be more environmentally friendly. Thank you for listening and we will see you next time.

Tag

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