Voices of Sustainability: Season 1, Episode #4

Phillip Schlies

TRT: 32:42

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 Romain An-goo-zhart will be speaking with the CEO of BFIVE40, Donna Brinn. BFIVE40 is a textile company that produces sustainable technical textiles for high-performance markets. We'll dive into Donna's journey to sustainability, her challenges and triumphs in her business, and how she continues to keep her business sustainable. Let's get into it.

Script

Romain Angoujart

Hello everyone, welcome to our sustainability podcast. I'm Romain your host. In this episode, we're honored to have Donna Brin, a pioneer in the sustainable textile industry. I hope you will enjoy this episode. Thank you for listening.

Donna Brin

Great. My name is Donna Brinn. And I am the owner, founder and CEO of BFIVE40. And we're located in Little River, South Carolina. And we are a custom manufacturer of sustainable technical textiles for high performance markets. So what that means is that we have a digital print cut, sew embroidery and knitting operation, where we focus on utilizing recycled textiles for a variety of applications, sports apparel, all the way to interiors for automotive. So my background, I worked I'm from New York, I've been living in South Carolina for 10 years. I attended university at Manhattanville from my undergraduate degree in business, and then I have an MBA from Cornell University.

Romain Angoujart

I saw it was interesting on LinkedIn, like you were in the sales in of energy. That's right. And like, a small gap, and then you started a few other businesses, including this company. This is a big shift, right? What led to this change?

Donna Brin

Yes, Ok. My previous career before starting BFIVE40, I worked on Wall Street for 12 years, and I worked in the energy commodities business. So, I worked mainly in a sales and risk management role, to help producers of oil and gas to hedge their price risk against volatility. And so that was an exciting career. And then I got married and had children. And I've always been mindful of the environment, and sustainability. And I, you know, cloth diapered, my children, and you know, I made my own baby food. And I did all of that. And then as I, you know, as the children started to get a little bit bigger living in Brooklyn, my husband wound up coming home with a toy product that I remembered from when I was a kid, it's a, an inflatable punching bag toy. And we wound up figuring out how to make it better, it didn't last very long. And it was made out of harmful PVC materials. And so we made it better. And from there, I said, you know, what, let me take a prototype to a toy fair, that was happening in Manhattan. And I did that. And I wound up selling 500 units in about three days. And then you know, of course, I had done my due diligence leading up to the Toy Fair, so I knew how I was going to produce the product. But then, you know, nothing ever goes according to plan. And so, within a couple of years, we figured out the manufacturing and had product in the market and Walmart came along and, and then we got distribution. And, and then BFIVE40 was born in 2018. So that's kind of what happened leading up to it, but always with a focus on sustainability. So, we're making the product out of polyurethane instead of PVC, and then covering it with a fabric covering that was made from recycled plastic bottles. And so it was a really fun transition that brought me to today, which is really, you know, a successful business focused on so many more things. So yeah.

Romain Angoujart

Okay, that's very interesting. Your company's in the textile industry. Would you say that making the product last longer was one of your main concerns?

Donna Brin

Extending our business platform? Yeah, I mean, we started off with just one product, the the inflatable punching bag toy with the fabric cover. And that gave us you know, the foundation for our business and I was subcontracting at the time. So what that means is that I had a company in Rock Hill, South Carolina, making the inflatable, and then I had a print, cut and sew operation in

Florence making the cover and then I was working out in my garage to bring the pieces together and then pack up the product to sell it to Walmart. And, you know, after we had enough after I had enough coming in, I decided, You know what, let's figure out how we can do this ourselves and that company in Florence was very gracious to allow me to shadow their operation and, you know, understand how it worked because they were doing print cut. And so and, you know, I talked my husband into joining me to, you know, to head up the production side, and with the technology that we use to make the inflatable, so it was sublimation, printing, and then sewing. We hired, you know, somebody to do the sewing and Dan figured out how to do the printing. And then we figured out all the other things we could make. So the toy product started as the basis for the business. And then we knew we could make banners and flags and table coverings with the sublimation, print, and then apparel. And then, you know, then there's a whole nother dialogue that goes around what happened with Covid. But at the end of the day, one product turned into a suite of products, because we figured out how to leverage our technology and base the whole thing in a sustainable framework.

Romain Angoujart

Yeah, yeah. Speaking of technology, I heard that you were using 3d knitting. Could you explain me what the differences between 3d knitting and regular knitting? What does it allow you to make that regular knitting cannot?

Donna Brin

So 3d knitting is very exciting. We're the only company in South Carolina with the technology focused on technical applications, and sustainable yarns. So 3d knitting is very similar to a 3d printer. If you know how that works, you are loading the machine with plastic and then you get this. Or you're programming the machine to create a plastic part to spec and with 3d knitting, you're programming the machine to create a knitted part to spec. The best way to explain the value proposition is that the substrate that we're using with the 3d Knitting Machine is yarn. So you're programming the machine to use the yarn, and to make the product in one operation. So you're eliminating cuttable waste. So what that means is, we're not taking a roll of fabric, and then putting the pattern on the fabric and then cutting it out. And then all of the cuttable waste goes into the landfill. And then we sew it with 3d knitting, we actually are making the shape. So it's called knit to shape technology. So you will eliminate cuttable waste, you simplify your manufacturing process. And then we're also utilizing yarns that are derived from plastic water bottles. So there's a bottle count associated with each product that we make. So it speeds the process. It simplifies the process eliminates cuttable waste. And it also makes prototyping a lot easier, because now you don't have to worry about tooling changes. Now it just is all about changing the program code.

Romain Angoujart

And speaking about the yarn, so could you explain me please, how do you get this product? How do we get to the yarn? What's the process bit between like, the plastic butters that you use, and transforming them into the yarn and then into the final product?

Donna Brin

Yeah, it's amazing. So we do a lot of work with. We do a lot of work with a company called unify. They're located in Greensboro, North Carolina, and they make a product called Repreve.

And you'll see Repreve on many store shelves, it's many products now. So they have a very large facility in Yakinville, North Carolina, and they collect bottles from all over the world. And they break those they wash the bottles, then they break the bottles down into chip form. And then the chips are melted into pellets. And then the pellets are extruded into fibers. And then the fibers are sold to the fabric mills. And then we purchase the fabric that is a finished good it's called PFP fabric prepared for print because we're a sublimation printer. And then it comes in on 60 inch wide rolls 75 pounds roll of pure white fabric that then gets loaded onto our machines for printing, cutting and sewing.

Romain Angoujart

Yeah, you would agree that we've made that the textile industry very polluting because of the process to use like polyester, cotton. And so your technology and new process allows you to use recycled bottles and so not like extract materials from the earth and like try to fix this problem of resources that are limited on Earth, right?

Donna Brin

Yes. So let me clarify a few things, it's important to understand so, sublimation printing, the majority of our fabrics are polyester based. So polyester meaning could come from petroleum. Polyester does not break down well into the landfill. And so our business case is really more about the reuse case about giving plastic bottles another life. So we also are exploring the opportunity to put in an additive into the textiles that we're using, that will allow them to break down the landfill faster. And that's called C I C L C O. And it's an interesting additive. So a lot of scientific research behind it, that if you add it to the polyester fibers, it'll basically trick microbes into thinking that they're munching on a natural fiber, like a wool or cotton. So you get the best of both worlds. Polyester is extremely durable, and long lasting and provides sun protection. And there's just so many amazing characteristics of polyester, but it's bad for the environment. So that's our sustainability, look at taking a polyester product and making a reuse case out of it. And then the other is the 3d Knitting technology. And that is reducing kind of a waste. And you know, this cuttable waste, like you had mentioned in Textiles is just a disaster for the planet. And so being able to utilize the technology to make products that eliminates cuttable waste, that is knitting to shape in a three dimensional way, the actual product, and reducing or eliminating the cut to sew element and eliminating the cut that you know, the cuttable waste is really extraordinary, that would be very impactful for our environment.

Romain Angoujart

Yeah, I see. If you would give me your vision and your definition of sustainability, what would it be?

Donna Brin

Well, my vision is that we create a better planet for the next generations and beyond. I think at the rate that we're going now, we are not going to be here for very much longer. And the textile industry is one of the main culprits along with you know, fast fashion, and there's a lot that needs to change. Okay, so that's my vision is to make an impact with manufacturing in the textile industry.

Romain Angoujart

Yeah, mine would be like, living our life and trying to have like an impact, that will not be negative for the future generation. It's like not compromising their ability to live and to survive. So I will say like, maybe I don't have children, but are your children like a motivation to have this positive, positive impact on the world? To live like a better planet Earth for them?

Donna Brin

Absolutely! I practice what I peach what I what I preach, for sure. And you know, that started all the way in the very beginning with not using disposable diapers. I mean, that was my first. So my children, really, you know, the expression is walk the walk and talk the talk they do. We, you know, we don't use plastic bags, we, you know, reuse our grocery paper bags for garbage. And we bring everything to the recycle center. And it was very eye opening coming down to South Carolina, from New York, because in New York, there's a much greater focus on sustainability, like our garbage pickup, we would have our own dedicated can and they made it very easy. And here for like, you know, until I moved to North Myrtle Beach, I had to go to the recycle center with everything. And I did those things, because I knew that it was what we needed to do, I needed to show my children that this was important. And I also need it to do that for the planet. And so yes, I'm 100% in on saving the planet through your individual actions and to my business.

Romain Angoujart

Yeah, it always starts like with taking easy to take actions that have an impact, and that maybe start you in this dynamic of sustainability. So this is very interesting. Could you give me like the biggest challenge you faced in terms of sustainability? Was it to find this provider fr suppliers was it to make the people know that your products are still sustainable? What would you be the biggest challenges you are faced with your company.

Donna Brin

Cost, it comes down to money. That's what it does. I mean, we have ample resources here. I mean, just Unifi and Repreve alone. There's and they have been champions of sustainability in their process and Yadkinville in the plant that I explained to you, you know, they've been doing this since the early 2000s. There, they were well ahead of their time, and bide their time to be able to get to a place over the last, you know, eight years, I believe that sustainability really has started to take a foothold in the market and gotten everyone's attention. And so, I can't even explain to you how frustrating it can be to work with large corporations that are still in the mindset that they have to they won't pay up to utilize a recycled fiber. Back 10 years ago, the pricing was very different than it is today. I mean, I think in general terms, it was two and you know, multiples back 10 years ago, today, it's 15, 20, 25% more, in some cases, in some cases, it's comparable. That's how much it's come in line. But at the end of the day, using the example of a piece of apparel, this is the perfect example. So let's just say a dry fit t shirt made by Nike, that is, produced overseas, and then comes in here as a blank. And then we would decorate as opposed to us sourcing the fabric from a South Carolina fabric mill utilizing Repreve fibers, recycled fibers, and then cutting and sewing and printing the product here. It'll cost 15, 20% more. There's a sustainability story, there's 10 to 15 plastic bottles that are diverted from the

landfill. And using our product, there's manufacturing here in the United States, there's the diversification of risks, supply chain risk, and being able to get the product faster, and the quality better, and all these wonderful things, somehow 15 to 20% is unjustified. And that is mind blowing to me. So until we get corporations on board, I think that we are going to struggle in the textile industry to really make a difference, they have to fund this in that way, by paying that extra amount of money to get these products and use these products that are made here that are sustainable, that have a low and that have a smaller carbon footprint. That's how we make the differences getting corporations on the board.

Romain Angoujart

Yes, sustainability has a price. And for me, it's nonsense that products that come from China or Asia that travel around the world are less expensive that products that are locally produced in South Carolina or in whatever cities is close to the city. And I don't like I don't figure it out how it can be like less expensive to make a project traveled around the road and still less expensive than sustainable products. So this price, is it like you reduce your margins? Or is it like? Is this price like disclosed visible on the final price of the product? So do you like have this issue and having like smaller margins that you would have with normal product.

Donna Brin

So I mean, we're getting to the point now where it's going in the right direction, as I mentioned 10 years ago, it was you know, multiples and are exponentially more expensive. And now it's we see it coming into line. And like I said with some products, we actually it doesn't cost any different to buy something that or to make something that's produced here and made with recycled fabrics. But, you know, I think that the way forward is more demand for these products, because as there's more demand, then they'll be more supply created to meet that demand. And that will help to drive the prices down as we get more people on board utilizing these, you know, these recycled fibers. And, you know, and I think that that's really going to be the key, and then also the government regulation. I mean, we look a lot to Europe, Europe has really been at the fore front of sustainability and continues to be, especially France. You know, and I think it's really important to use those business models in those cases, and the regulations that the governments require, you know, we're starting to see that here with ESG goals. And requirements that corporations are now having to, you know, align with. And it's, that is what's going to drive change. Like I said, I really think that it needs to be at the corporate level. And I think that we're headed in the right direction. The U.S. has just taken a long time.

Romain Angoujart

Yeah. That's how the market is made I guess. So would you say like, the main responsibility for is for the businesses, or at the end, like every stakeholders, like the individuals, the government's the NGO, and the businesses must work together towards those goals?

Donna Brin

Yeah, I mean, listen, Romain, if you can figure it out, I would, you know, be forever grateful. I think that, like I said, we're heading in the right direction. But I do think that all of those things that you mentioned, do need to work in tandem to make this happen. But I do believe that corporate responsibility is going to be a significant driver. And, and governance in policies is, is also right out there. And then manufacturers like me need to be supported, we are small business

that are doing good. And, you know, we need to continue to do good and have the ability to make a margin and employ our workforce and train our workforce. And, have access to these great substrates and raw materials, and produce good quality product that people are willing to buy. And that cycle.

Romain Angoujart

What do you think the importance of communication is, I saw on your website that you had, like, a media page dedicated, and showing the achievements, the process and whole about your company, how you think, like, communication is very important to show the example and lead the way for those businesses and individuals that are maybe late on this sustainability train?

Donna Brin

Yeah, I mean, I think it's critical, you have to have open communication. And I think, being able to showcase all of the accolades, and the achievements that you make is all part of, you know, having pride for what you do, and, and getting visibility. And so I am a big advocate of apprenticeship. And very active in our community, I'm active with Coastal Carolina University, I love working with students, I love to speak at the schools. We have a good relationship with Henry George technical college. And it's critical to have a voice and to support and help develop the next generation to carry on that voice. So that my 11 and 14 year old, have a place to live in the next 20 years, versus where we're growing now, with our current situation, you know, with bFIVE40, we'd like to say that we are changing the status quo. And we change the status quo in three ways. One is through apprenticeship. So developing our workforce locally and training in highly skilled positions, and two is utilizing sustainable fabrics and processes to make a better planet. And three is working with vocational rehabilitation of Conway, which is a wonderful training facility close by, that works with people that have disabilities. And, you know, these are the ways that we believe we can make change to change the status quo. And, and that's bFIVE40. And maybe I'll just end very quickly with just saying what bFIVE40 means. So, bFIVE40. There are 360 degrees in a circle. A circle is a flat shape. When an object becomes three dimensional, it does so at 540 degrees. So think of a sphere 360 plus 180. And where I go with that is that when you do business with bFIVE40. It's deeper than that. It's three dimensional. It's about the apprenticeship. It's about the sustainability. It's about working to better our community. And so, yeah, we are deeper than that.

Romain Angoujart

I love the meaning of that. And if you have the time, I have two last questions for you if it's okay. How do you measure sustainability in terms of environment? And also in terms of society, you talk about apprenticeship? How do you know like you are doing good? And what are the metrics you can use to measure that.

Donna Brin

So working with Repreve, that's owned by a Unifi they're very large corporation that has a very robust reporting system. So we measure sustainability through the products that we purchase, that are Repreve, they come with certified eco facts or reports that will tell us when we buy, you know, a skid of 100% polyester, we know that every yard diverts you know, 15 or 20, whatever it is, plastic bottles from the landfill, and then we know how much yardage we're using in the product. And then that's how we can be able to put an exact bottle count to each product that

we produce. So it all comes from we lean on the reporting mechanism from Repreve. There are lots of different agencies out there that we've started to look into now, including ISO certifications that we could get. And we're working towards doing something like that, because the automotive industry, which is part of our strategy for 2024. Forward, they will require so we are looking at expanding our ability to report and our metrics, but that's how we keep ourselves accountable now.

Romain Angoujart

Yeah, we had this debate in class, like, I think like metrics are very specific to the industry you work in. And it's very hard actually like to measure how you are doing like, it's easy to measure financial and economic performance, but in terms of sustainability, like the metrics are still developing. And for now, you must go, maybe blind and discover what's the best solution to measure your efforts. So this is really interesting. My last question is, what piece of advice would you give like to a student that is looking to have a positive impact on his personal and professional life?

Donna Brin

Work for a small business like mine, so that you can be right in the heart of it and understand how it operates and see the actual impact that you're making on the environment with each product that you produce. And I really feel like when you submerge yourself into that culture, that it becomes contagious. And then you're doing it and then someone else sees you do it, and then the next person, and they ask why. And then all of a sudden, you become this billboard for the things that you stand for. And if those things are around sustainability, then I think we're going to make this planet a better place.

Romain Angoujart

So let's get in the field and do it.

Donna Brin

Let's just get into it.

Romain Angoujart

And I assume that is very rewarding to like, see the results of your own work. And how that you made these result.

Donna Brin

Yeah, I mean, I am, I just have so much pride in everything that we do, and especially being able to give my children, my two boys, the example to lead as a woman and lead as someone that is focused on sustainability and making a difference. And, you know, there's a lot of people out there that, you know, we'll come up with every excuse in the world not to take the extra effort or, you know, use the extra money to make the purchase that, you know, was part of sustainability. And I it just saddens me, and I know that everyone can change so I just keep on you know, keep on keeping on with what we're doing. And, and I make strides every day and that makes me feel good.

Outro

Thanks for tuning in. I hope you've enjoyed getting to know Donna and learning more about BFIVE40. Donna's story goes to show how a simple idea like improving a kid's toy can lead to much greater things. All it takes is an idea and a willing person to contribute to a more sustainable future. However, that's all the time we have today. Tune in next episode to hear our guest from Delta Bravo AI talk about how artificial intelligence can lead to more efficient and sustainable businesses. Thank you for listening and we will see you next time.

Tag

The Voices of Sustainability Podcast is produced by the Darla Moore School of Business, and production was overseen by Dr. Laura Smith from the USC School of Journalism. This program was also made in partnership with Sustain SC. And last but not least, funding was provided by the Alfred N. and Lynn Manos Page endowment for sustainability in business. Thank you.