

Women in Business and Technology

Transcript of Episode 023 - Forging team and product inclusion with Glowforge CEO Dan Shapiro

Guests: Dan Shapiro

Summary: Sonia and Colleen play Robot Turtles, a game that teaches kids about programming. We hear from attendees at a STEM Exploration Day coordinated by Young Women Empowered. Colleen interviews Glowforge CEO Dan Shapiro about building inclusive teams and products. Our hosts wrap with coverage of BCG's recent analysis, "Why Women-Owned Startups are a Better Bet."

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DAN SHAPIRO: One of the first tests that I apply to any company that says something is important is: Are you spending money on it? Because that's what companies do, right?

COLLEEN O'BRIEN: Yes.

DAN SHAPIRO: They spend money to solve problems. And so if a company says, "This is a problem, and here's all the papers we're writing, and here's all the things we're doing," but they aren't actually putting real dollars against the problem, it's probably not something they really consider a problem.

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NARRATION: You are listening to the *Women in Business and Technology* podcast from Microsoft. In each episode, you will hear from women in amazing technology and business roles, as well as male allies, who are helping make the industry more inclusive, and bringing you tips on how to build a successful career in supportive community.

Welcome to *Women in Business and Technology*.

(Music.)

SONIA DARA: Welcome to Episode 23 of *Women in Business and Technology*. I'm Sonia Dara.

COLLEEN O'BRIEN: And I'm Colleen O'Brien.

SONIA DARA: We're kicking off this episode with some reporting from a STEM Exploration Day that happened here on Microsoft's campus that was coordinated Young Women Empowered, a nonprofit organization that provides mentorship and empowerment programs for teen women in the greater Seattle area.

COLLEEN O'BRIEN: And then, we'll jump into an interview that I had with Dan Shapiro, the co-founder and CEO of Glowforge, a Seattle-based company known for creating a beautiful 3D laser printer, and for their inclusive hiring and retention practices.

SONIA DARA: And then, finally, we'll wrap things up in our Cutting Edge segment with a look at a study released on June 6th from the Boston Consulting Group and MassChallenge, which examines the gender investment gap.

COLLEEN O'BRIEN: But before we jump in, Sonia and I are wrapping up a quick game of Robot Turtles -- a board game that was created to teach kids the fundamentals of programming.

When it initially launched, Robot Turtles was the most-backed board game in Kickstarter history, and it was created by our guest today, Dan Shapiro.

SONIA DARA: The game was created for kids four and up, so while Colleen and I aren't really the target audience, we wanted to see if we could learn some programming concepts here. The goal of the game is to get our respective Robot Turtles to their corresponding color jewel on the board.

COLLEEN O'BRIEN: Yes, so I am the blue Robot Turtle over here, and Sonia's the red Robot Turtle.

SONIA DARA: Yep.

COLLEEN O'BRIEN: And each of us is using code cards to turn the turtles left, right, or to step forward. We're doing the Quick Starter version of the game, so it's fairly simplistic, but there are more levels and concepts to introduce along the way.

SONIA DARA: A pretty cool instruction here is that you, as the player, do not move your own turtle. It sets up this dynamic that the player is writing the program, and another person is the computer moving the turtle in response to the commands.

COLLEEN O'BRIEN: One of my favorite parts of the game is that we're each given a bug tile -- literally, a round cardboard piece with a ladybug-looking creature on it -- and I can undo my moves before Sonia starts her turn by tapping the tile and yelling, "Bug!" (Laughter.)

SONIA DARA: Yeah, we have a few more rounds to play here before we get our Robot Turtles to their jewel destinations, and a few more bugs to catch -- I love that -- but you can find more information about the game at robotturtles.com.

Okay, move the blue Robot Turtle one step forward.

COLLEEN O'BRIEN: Beep-boop, beep-boop! This is a requirement in the instructions that you have to make Robot Turtle noises. (Laughter.)

(Music.)

NARRATION: Community Connect. Get involved and stay connected.

SONIA DARA: In late March, our amazing producer, Lexi Swanson, attended Y-WE's second annual STEM Exploration Day here on Microsoft's Redmond campus.

Y-WE, short for Young Women Empowered, is a nonprofit organization that provides mentorship and empowerment for young women ages 13 to 18 in the greater Seattle area. Their STEM Exploration Day was attended by almost 100 teen women, and kicked off with a panel discussion on college as an inroad to a STEM career.

Panelists Farzana Rahman, a group program manager here at Microsoft, and Klondy Canales, and program officer with the Washington State Opportunity Scholarship, shared strategies for applying to college and navigating STEM majors.

The panel was moderated by Microsoft HR Manager Pamela Soberman, who has been involved with Y-WE for two years now. She explained that the organization's focus on diversity has been a key reason for her dedication.

PAMELA SOBERMAN: What I love about Y-WE is how it purposefully creates a diverse community. So 90 percent of the youth are low income, and the majority of the youth are youth of color. And I think it's really important, especially in a community like Seattle, which can feel non-diverse, for these communities at times they can feel very alone in their schools or in their communities. There's no one who looks like them, there's no one who can relate to the struggles that they're experiencing in their schools and their communities.

So I love that Y-WE has given me a way to engage in the Seattle community and contribute and help make this population feel like they belong here and, you know, I see their potential and this organization's invested in their potential and empowerment.

SONIA DARA: Reagan Jackson is the program manager for Y-WE, and a self-described four-generation black feminist. She initially got connected to the organization as a

volunteer, sharing her career story with young women, but the energy of Y-WE convinced her to join as a staff member.

REAGAN JACKSON: It is incredible, the energy, the youth, the way that they interact with one another, like it's hands down the most positive girls' space I've ever been a part of, and also the most diverse community I've ever been a part of in that when you come to Y-WE, there's not a super major of any one ethnicity. People come from all different backgrounds, and there's something really different to me.

Like, usually, I feel like when you go to schools or when you go to different programs, it's like even if they're for people of color, it's like it's more black people or more Latino people or more -- you know, there's like one kind of super majority. And with Y-WE, it's everyone. And when everyone shows up, it makes a huge difference.

SONIA DARA: The diverse community that Reagan describes is, oftentimes, the missing link for getting more young women into STEM. Student Elizabeth Michael explained how racial representation in the STEM industry, or lack thereof, is a motivating factor in her career pursuit.

ELIZABETH MICHAEL: What makes me nervous about having a career in STEM is me not finding a community for me to be in. Like, I'm a black woman. So, personally, when I have a community of people that look like me, I feel more motivated, but since I don't really have a community, I feel like it'll still motivate me to pave the way for other black women in STEM.

SONIA DARA: Intercultural and interracial support was a goal that Co-Executive Director Jamie Rose Edwards had in mind when she co-founded Y-WE in 2010. She explained the organization's broader mission to ignite community transformation.

JAMIE ROSE EDWARDS: So we're really here to make social change, and the vehicle through which we see a powerful change happen is through young women's leadership development and supporting equity in access to these kinds of programs for young women.

So while, on the surface, you think that we're an educational program for female-identified youth, we're actually here to make social change.

SONIA DARA: For more information about Y-WE's mission, values, and opportunities, visit youngwomenempowered.organization.

A big thank you to Pamela Soberman for tipping us off to this event, and for being an amazing supporter of our show. And thank you to Lexi Swanson for recording on site at STEM Education Day.

And now, let's get on with the interview.

(Music.)

COLLEEN O'BRIEN: I am thrilled to welcome to our show today the co-founder and CEO of Glowforge, Dan Shapiro.

Dan, thank you so much for being on the show today.

DAN SHAPIRO: Thank you so much for having me, Colleen.

COLLEEN O'BRIEN: I first came to know about you when one of my business school professors at the University of Washington, he showed us this promotional video for Glowforge, which of course is the iconic 3D laser printer that your customers are using to create everything from drones to engraved spice jars to amazing paper-cut wedding invitations.

Can you tell us a little bit more about Glowforge and what your day-to-day looks like as the CEO of that company?

DAN SHAPIRO: You know, people ask me all the time what I do, and I usually refer to it as management overhead and general-purpose troublemaking, because nobody's really told me what a CEO is supposed to do, so I kind of have to improvise.

But the background of the company came from a whole bunch of startups that I worked on -- a board game that teaches coding to kids, mobile image startup, e-commerce startup, and then some time working at Google and Microsoft, and came to this from a place of really being privileged in my life to have the ability to take dreams and turn them into things. And that's something I've been able to do for the past couple of decades. And part of that comes from having an engineering background, so I had the knowledge to do that, part of that comes from my background in the socioeconomic everything where I've been able to suggest things and have people pay attention to me and have the resources to go pursue them.

But all my life, I've been so lucky to be able to think up things and then bring those into the world through one way or another.

And so when I discovered this backwater industrial technology of carbon dioxide laser cutter engravers that was developed in the '60s and '70s and kind of untouched since then, I got really excited because it seemed like a realistic, practical way to make things that was simple enough that even my kids were excited about doing it, but powerful enough that it could actually make real products that people loved and coveted.

And I got really fired up around the idea of building this product that would take this industrial technology out of factories and deliver it to people, where they could go create things.

And the sort of meta-creation of, "Oh, my gosh, I could make something that lets people make things that they care about and love, and I could express my creativity by helping people express theirs?" Felt like, "Oh, my gosh, this is kind of my calling."

I actually put myself through college building laser shows, which is kind of a weird thing to have happened.

COLLEEN O'BRIEN: Wow. (Laughter.)

DAN SHAPIRO: It started out building laser shows, it turned into kind of a DJ business where, you know, we get paid to go to parties and project lasers on the walls and play music, and sold laser systems on eBay, and then just completely dropped it and wound up in software for two decades.

COLLEEN O'BRIEN: But this has been an accidental thread in your career -- lasers.

DAN SHAPIRO: Yeah. And it feels like a loop many years long now is closing where now I, in my 40s, get to go back and deliver something that always felt like a little unfinished business. Because when I graduated, I was excited about the idea of building lasers for a living, and just couldn't find a way that that made any sense whatsoever at the time. But now, I actually get to go back and do that.

And I cannot overstate what a privilege it is to be able to go and to create your dreams and to give more people access to that is something that just inspires me every day to come into the office and to do what I do. So I feel really lucky that I'm able to do that for a living here at Glowforge.

COLLEEN O'BRIEN: The community that you've built up around the product is so impressive and seeing how people are using this product is so compelling. I can say, after watching that video in there's business school class of mine, one of my classmates ordered Glowforge immediately, just seeing what other people were doing with the product. So I really commend you on empowering others to pursue their dreams, too, with that piece of equipment.

DAN SHAPIRO: You know, when I'm having a tough day, one of the first things I do is I go to Instagram and I look at the Glowforge hashtag and I scroll past the "best of" and I just look at the latest posts to see what people are doing and what's new in the world because of this product and because of this company. It's so incredible. It just blows my mind, the creativity that people have been able to unlock with this, it just humbles me

and dwarfs anything that I feel like I'm able to do. And to get to be a spectator and a part of that act of creation is just so utterly joyful.

And seeing that it's not just the people who've traditionally been able to make things who are making things, but it's jewelry designers and it's people in schools and it's artists and craft people who before haven't had access to woodworking tools or leather crafting or the like, can take technology and use that to scale their creative vision into a small business or a store.

One of my favorite things is we have a community bulletin board at community.glowforge.com. And anybody can read it, but only people who use a Glowforge can post to it. And one of my favorite posts is the "I just paid for my Glowforge post." And it's because every one of those represents somebody who had a vision and had a dream that started out as their spare time or as their hobby or something else, and then turned around and turned it into an Etsy store, turned it into a Kickstarter, turned it into something at their craft fair, turned it into a service that they're doing for their neighbors, and empowering other people with that power of creation and entrepreneurship is -- I'm repeating myself, but it's the highest calling for me in my work day.

COLLEEN O'BRIEN: And that community is not the only notable thing about Glowforge. I know that Glowforge boasts the biggest 30-day crowdfunding campaign in history with \$27.9 million in preorders in just 30 days, which is really impressive.

DAN SHAPIRO: That was a crazy month.

COLLEEN O'BRIEN: That sounds like a crazy month. Dan, why did you decide to go down this crowdfunding route?

DAN SHAPIRO: You know, a product like this has a natural home on the desks of engineers, small businesses, these sort of, you know, this business-to-business sales. And you know, charging \$10,000 for a tool that appeals to businesses is good business, and it's not what I wanted to do.

What I wanted to do was create a tool that could be as approachable and affordable to as many people as possible, something that individual people could own, and something that would appeal to folks outside of the maker bubble, because for a long time, the demographics for *Make* magazine were that it was white men over age 40 who were the bulk of people who identified as makers.

And that's not really exciting to me. I'm in that group, and it's a group of people who already have access to lots of ways to make things, and getting outside of that bubble was the core of what we wanted to build.

And not to put too fine a point on it, it was just an existential threat that our company was not going to be all it could if we just focused on the business customers, focused on the sort of people who identify as makers today.

So we wanted, from the very beginning, to build a company around the sort of broad and diverse customer base that we aspired to serve over the course of years to come. And crowdfunding is a really wonderful way to engage those potential customers from the very start and to prove that you're not barking up the wrong tree.

Crowdfunding has a big problem, though, which is that hardware crowdfunding campaigns are littered with the corpses of companies that took everybody's money and then went away. And I can't do that. I just -- there was no way I could live with myself if something like that happened, and there's real risk to building a product.

So we took this sort of weird hybrid model. We didn't go to Kickstarter, although I love Kickstarter, and I've used that for previous projects. We didn't go there because Kickstarter terms say you are funding a project, and you may or may not get something at the end. And the creator owes you're their best efforts, but they don't owe you a project. And we didn't want that.

So, instead, we built our own crowdfunding campaign site where we said, "You are preordering a product, and we owe it to you." And then we backed that up by raising money from investors. So we'd use investor money to run the company, and we'd only use our crowdfund dollars to pay for manufacturing.

And that put me in a position where, ethically, I felt good about taking those preorders and then working to go fulfill that demand using the investor dollars to run the company. And we were lucky to have really great investors who stood by us and backed that.

And when it turned into such a runaway success, we have an all-company meeting every Friday, and it's really sort of open season on questions. And so we were talking about a bunch of things about our future and plans, and it came up that when we were planning the crowdfunding campaign, we thought the lowest case was \$1 million and we thought we could do that -- not the lowest, but that's what we thought we could commit to, and the absolute most that we would every possibly sell was \$5 million. We were off by like a factor of six. (Laughter.)

And when we realized that, we took a deep breath and we looked back and said, "You know, we need to make this product worthy of this much broader audience than what we thought we started." And so we're going to take some more time to do it right. We're going to tell people, we're going to have a no-questions-asked, money-back guarantee, so if people don't like that decision, they can take their money and leave.

And it turned out to be a longer road than we thought. It wound up being almost two years before -- now the majority of those preorders have been delivered, we're just finishing up a few hundreds of domestic orders and our international customers have just started to receive delivery, but we expect those to finish up fairly quickly.

But it was a two-year wait for some folks, and that was a longer road than we planned. The amazing thing about crowdfunding is that you can build up a group of people who are excited about what you're doing and who can help inform that process. The downside is that you've got a lot of people's commitments and dollars hanging in the balance, and frankly, I felt like I'm in debt for years to our customers. And we are.

And so spending years feeling like you're upside down and sort of struggling to keep up with these promises you've made is hard on a team, it's a heavy burden to carry, but ultimately, absolutely worth it to have those sorts of passionate people who can help drive the product forward, make it better, provide a home for it, and then create such cool things.

COLLEEN O'BRIEN: Yes. Dan, I'd love to dive a little bit deeper into this hybrid funding approach that you mentioned. You know, many of the women entrepreneurs that we've hosted in the studio have pursued crowdfunding, and perhaps for good reason.

In 2017, *Fortune* reported that women had received less than 3 percent of venture capital money. I'm wondering if you think that crowdfunding is a viable alternative to VC investment, or if you really think of the marriage of the two as the sweet spot for funding your company.

DAN SHAPIRO: So I've raised money over the course of four companies or so from nine, ten VC firms, and I am deeply grateful to the investors who've made that.

At the same time, venture capital is deeply overrated. Venture capital is this weird little backwater of company financing that only a tiny, tiny percentage of companies use.

So I wrote a book called *Hot Seat: The Startup CEO Guidebook*, and tried to dive into this a little bit. And I believe the number was the U.S. produces more Olympians each year than venture-backed companies.

COLLEEN O'BRIEN: Wow. (Laughter.)

DAN SHAPIRO: So venture capital is like this tiny little thing, but somehow it's managed to be the thing that gets the *Silicon Valley* TV show and gets the attention and all that when, in fact, it's actually a really small part of economic creation in this country.

And in terms of how companies really get started, it's rarely VC. It's much more often things like small business debt or individual friends and family investors, or now crowdfunding.

And so I don't think crowdfunding is an alternative to VC, because VC helps in this one small, weird case of a company that's small, but it has enormous potential, but very likely to fail utterly. The company is going to be burning money at a ferocious pace to try and grow really fast and use investor capital to grow really fast to try to become a billion-dollar company, and most of them flame out along the way. And it's this very unusual case.

It's also tremendous unfair. The numbers don't lie. VC funding is not distributed equitably, and it is a broken system. And there are some great investors I know who are working really hard to fix that, and there's a lot of inertia behind the old system. And it's not something that I recommend lightly, and it's not something that's right for most companies.

Crowdfunding is amazing. I saw some numbers from Kickstarter a while ago, and I don't remember them off the top of my head, but women are more successful than men at crowdfunding. Women-backed campaigns tend to raise their goals more often, and the numbers are really promising. And that's true, by the way, if I recall, in all categories, including tech, that is women-sponsored tech crowdfunding campaigns are more likely to succeed than men.

And there's a tremendous ability there to go raise money from a loyal following of people to go and build a product.

Now, we were in a very unusual case. I don't recommend it. So to answer your question straight up, is that hybrid model right? No. It's almost certainly wrong. I was in this unusual case where we were taking something that was a really high dollar value, that had technology risk attached to it, that had not been created before, but was coming from three co-founders who had no excuse to make their backers take any risk.

So when somebody goes on Kickstarter and they say, "Look, I can't afford \$10,000 to go do a production run of my book unless you back me, and I haven't done this before, so there's some chance I might screw it up," that's amazing and it's appropriate for them to be transparent about that and for backers to take risk with that person.

But I couldn't live with myself if I took thousands of dollars from normal, everyday people and then said, "Oh, didn't work, sorry, never mind." And I had no excuse to do so, because given the background I've had and the privilege that I've had, I could go raise those dollars. The only reason I wouldn't is if I was greedy and said, "Oh, no, I don't want to get an investor involved because I'd have to give up some of my company in order to do that."

So I had that option, and there was no reason for me not to take it. But it was a really weird confluence of circumstance.

Crowdfunding is a fantastic avenue for people to be able to put an idea out into the world, only move forward with it if the demand is there to make it happen, and then do so with a set of people who understand the risk and understand what they're getting into and are kind of all in it together.

So the hybrid that we did made sense for us because it let us take risk without our customers taking risk, while at the same time giving us that customer base to go on our journey with, but it's not actually the one I'd recommend anybody else. I think traditional crowdfunding is fantastic.

And I think VC, it's right for some companies, but it's pretty broken right now. And it's one of those things where I hope the industry changes, because right now, I wouldn't wish the experience of VC on diverse and underrepresented peoples because it's not a fair system, and we've just seen time and time again those resources aren't allocated fairly. And it makes me really sad because it's a terrible, broken piece of the ecosystem. Fortunately, a small one in the overall scale of how businesses are funded.

COLLEEN O'BRIEN: You mentioned at the end of your answer here that the system is not incredibly equitable or fair for maybe underrepresented peoples -- people of color, women, people with disabilities who are entering into the system -- and I know that you have a lot of ideas in this realm. And I'd love to jump into them now.

You know, in doing research for this interview, I spent a lot of time on the Glowforge website and was really drawn to the "About Us" page of your site. There's a photo of every member of your team, along with a short personal bio.

But this is really rare. I've visited a lot of websites in doing this type of research, and it's typically just the executive team that's featured. I couldn't help but think that this page was a pretty tactical example of your philosophy around representation. Why are you using so much of your website real estate to showcase your team?

DAN SHAPIRO: That's an astute observation, and it wasn't a decision we made lightly, because best practices are that you don't do something like that because it just opens up your team for poachers, for people from other companies who want to hire them away.

And it was something that we really put some thought into. But words are cheap, actions are harder. And so when I thought about -- from the very start, when I thought about our company, I thought about it from the context of how do we dig out of our "white guy" hole? We've started out underground by having three white guys as co-

founders. And for a company that aspires to serve all the diverse peoples of the world, that's a disadvantage because I don't believe you can build a company that serves the full breadth of our potential customers unless we hire people who come from the full breadth of our potential customers.

I think putting blinders on is a huge disadvantage. And I think the converse, being an inclusive company where people of all backgrounds are welcome is a strategic advantage because people who feel unwelcome elsewhere will be available to us where we might not otherwise be able to hire them.

Anecdotally, we found that to be true. It turns out that not being a toxic hellhole is actually a strategic advantage.

COLLEEN O'BRIEN: Absolutely. (Laughter.)

DAN SHAPIRO: And when we have people interviewing with us and they're, like, "Hey, the place I'm working at is terrible and I'm not appreciated there and it's not a good environment and I've heard that this place is." And those are people who would not be coming to us if we were just like every other -- not every other, there's a huge breadth there, but if we were not attentive to these things and not trying to get the best people for the job regardless of background instead of the best people for the job ignoring background, which tends to just produce the same results over and over again.

And we knew how much the sort of hiring for company culture and hiring out of your network, while they sound nice, turn out to mean, "Hire more people just like the founders."

I mean, the typical answer to, "What's company culture?" is, "Company culture is people like us." That's the literal opposite of the word "diversity." I mean, that's not even -- that is the opposite of what that word means. If you're trying to hire people who are just like you, you are trying not to be diverse.

And so we went into this with a question of, okay, how do we back out of this? And how do we acquire habits and organizations and structures and reputation and, ultimately, a team that's as diverse as the customers we hope to serve?

And that hiring page is more the result than the process. It's the way that people can see the degree to which we're successful. Our company is about half women, the tech team is about half women, people who are traditionally underrepresented in tech, people of color and from different ethnic backgrounds represent about 30 percent of our total workforce. We're not all the way there, our executive team is still way less diverse than the rest of our company, although our leadership outside of the exec team more or less matches it.

So we've still got a ways to go, but we kind of have it on display for people to judge for themselves how we've been doing on that front.

COLLEEN O'BRIEN: Right. And those stats are really impressive, especially if you compare them to the industry norms. So I want to commend you on that before we keep going.

DAN SHAPIRO: I mean, you know, thank you. It's also totally selfish because we are such a better company for hiring the people who make the world go around and hiring the people who buy our product and hiring the people who are out there in the world, rather than just the tiny slice of folks who are typically hired at tech companies.

So, thank you, but you know, it's selfish on our part. We're doing it for our own benefit.

COLLEEN O'BRIEN: These types of diversity metrics tend to become a priority when a company gets to a certain size, but I want to comment on your idea here that you had to dig yourself out of a "white guy hole." Do you have any recommendations for entrepreneurs as they're building up their companies to keep diversity top of mind from the get go?

DAN SHAPIRO: So there are a lot of strategies, and some of them are show, some of them have meat to them. This is the approach we took: We said, first off, federal law and ethics and common sense are all the same. Which is, if somebody walks in our door and interviews for a job and they're going to be great at that job, we hire them. Period. Full stop.

And if somebody sends us their resume and they look great, then we're going to bring them in and talk to them. Period. Full stop.

And that means that all our diversity efforts have to be targeted at bringing in people who would not otherwise send us our resume. That's the way we build a more diverse team is by good attractive to folks of all backgrounds, not just the folks who are traditionally represented in tech. And that's the front end.

And then in the back side, troubleshooting all the problems that tend to exclude diverse people from the process -- interview questions and processes that feel unfair or colored or biased and so on.

And so delivering a path where we can get all the great talent and evaluate all the great talent fairly and then bring in people who are great for the role regardless of background, and do that in a way that's attractive rather than off-putting to people from diverse backgrounds.

One of the first tests that I apply to any company that says something is important is: Are you spending money on it? Because that's what companies do, right? They spend money to solve problems.

COLLEEN O'BRIEN: Yes.

DAN SHAPIRO: And so if a company says, "This is a problem, and here's all the papers we're writing, and here's all the things we're doing," but they aren't actually putting real dollars against the problem, it's probably not something they really consider a problem.

So one of the first questions we asked was: How can we put dollars against these problems? And so I brought on -- early on -- some great advisors and have continued to sort of build out that realm of advisors both official and unofficial, people who kind of help keep me honest about what we're doing and how it's affecting underrepresented communities.

And the really powerful thing is now we have a company that's diverse enough, and people here who are comfortable enough that when we're doing something that's a little off, I hear it from our own team. I'll get notes internally from people that go, "Hey, Dan, that thing you said didn't land right, or this thing we're doing, I'm not sure that that's really making people like me feel welcome."

But at the start, you have to look outside. So bringing in advisors who are of diverse backgrounds who can advise you on diversity, that was one of the first things I did and one of the most helpful things. And I immediately learned stuff that we were doing that was turning people off.

And in terms of putting dollars behind it, we used products like Textio. Textio.com is a product I love from an amazing CEO, Karen, who built a system that uses machine learning to identify text that attracts people to job postings, particularly diverse folks, and determined text that repels from job postings -- again, particularly diverse folks.

So it will tell you, "This language is strong," or, "This language is off-putting, and here's ways you could change it and improve it."

So we were one of the first paying customers for that product so that we could benefit from that from the outset. We also invested some dollars in the most direct way we could, which was a referral program, where if someone refers a candidate to us who we hire, who self identifies as being underrepresented in tech, then we'll pay \$5,000 as a referral bonus for whoever referred that to us.

COLLEEN O'BRIEN: Wow.

DAN SHAPIRO: As long as the person who referred is outside the company. And that last caveat, there's actually a lot underneath that. It took us four months and I don't know how many lawyer dollars and hours to get that program so it would be legal. There are all sorts of ups and downs in terms of how the law works that made it difficult for us to do that. And one of the constraints is we couldn't offer that to internal refers, only to external, and there are various other considerations.

But after a lot of work with the lawyers, we finally found a way that we could literally pay for diversity, because we're a company. And if we want things, we pay for them. And so trying to do that was one of those pieces, as well as just kind of keeping our ears to the ground.

So something I did as just a personal exercise was try to make my Twitter feed represent the demographics of the world in terms of people of color, in terms of women, and so on. And in doing that, I started seeing things kind of differently. And one of those things that just totally shocked me was when -- I think it was Lee Honeywell tweeted something about how health care that was inclusive to trans folks.

And I had no idea what that meant. And so I started researching and, put simply, there are some people, and it's not just trans folks, it's also people who might be expecting a pregnancy or need bariatric care who have urgent medical needs that are not covered by every company who may not be able to take a job based entirely on what's basically fine print in the company's healthcare plan.

And so they're in this horrible, unfair, ridiculous position of they have to ask a recruiter for a company that they're thinking about working at about the details of the healthcare plan, which disclose really deeply personal information just so they can find if they can take a job there or not. And it's bananas that you need to ask about these sorts of preexisting condition questions and coverage questions with a company that you're interviewing with.

And this had the simplest solution in the world. So we started putting our health plan on our website. So anybody who wants to apply to Glowforge can look at the healthcare plan and see if it covers their needs. No reason not to do that. It was the easiest thing. It cost us nothing, but it was something that we could just do based on kind of opening our ears to the world.

And then the last thing is companies try and save money by negotiating with people. They make low offers and then the theory is that sophisticated and desirable employees will ask for more money. In practice, what happens is that people who are underrepresented in tech understand intuitively that asking for more money and negotiating can be disproportionately harmful to people who are underrepresented in tech, and there's a great body of research that shows that women and people of color

and other folks underrepresented in tech are penalized for negotiating, whereas white men are not, or are less so. And so they don't. And so they get paid less.

So, the other way we kind of put our dollars where our mouth is, is we offer everybody the best offer. We give everybody the offer that we give to people who we absolutely have to have the very best, and we are very transparent about it -- with a little asterisk. We actually give an opening offer, and then we say, "Tell us if you want more stock or more cash, and then we'll give you our final and best offer, which will be better than the last one." And for every single role, we define those ahead of time before we know who we're hiring for the role and we know what that opening offer is and the sort of best possible offer. And so there's no negotiating, and there's total transparency. And we say, "You know, here's what it is, and we're going to give you an even better offer when you tell us what's most important to you, and it's going to be the same offer that anybody is going to get, so you don't have to negotiate against yourselves."

And that means that we pay a little more because we don't save money by underpaying people who don't negotiate, but again, that's what you do if something's important to you -- you pay for it, if you're a company.

COLLEEN O'BRIEN: Right.

DAN SHAPIRO: So those policies all came about as ways to kind of put dollars behind that goal.

COLLEEN O'BRIEN: I hope that all of those policies become industry standard immediately.

DAN SHAPIRO: Please steal our ideas.

COLLEEN O'BRIEN: Yes. (Laughter.) Dan, in addition to putting your money where your mouth is, I know that you're also being really considerate about how you're spending your time. So after that initial exposure to Glowforge in school that I mentioned, I saw you again at a speaker event series called How to Win it Seattle, that was produced by The Evergrey.

DAN SHAPIRO: Yeah, Monica Guzman, a good friend interviewed me for that. It was so much fun. She's just amazing.

COLLEEN O'BRIEN: Yes. And in that conversation, you talked about sharing your expertise with up-and-coming tech professionals. And I remember you explicitly stating that you were dedicating most, if not all of your mentorship hours to support women and people of color. Is that correct?

DAN SHAPIRO: You know, yes. And that heavy sigh was because I used to be closely involved with three organizations -- three organizations that help young startups and sort of provide organized mentorships.

And without naming names, one of them stopped being involved because they stopped being active in Seattle, which is fine.

One of them, the leader of the organization it turned out, was a serial harasser and the feeling that I had on knowing that my dollars and time, because I'd actually invested dollars in this organization, were actually being used to hurt people who are underrepresented in this industry, was just horrifying and so deeply shocking and terrible. Words fail.

And so, of course, I cut active ties to this organization. That was just heartbreaking.

And then the third organization that I was working with had an annual class of 20 and had not been doing great on diversity. And one year, they actually had 20 people, none of whom was a woman or person of color. And I said, "Oh, my gosh, you somehow managed to be worse than Seattle average. I didn't think you could do that. I'm out." And left the organization.

And to their credit, they've improved since then, but I've just taken the approach of, in general, I'm really focused on Glowforge and I'm not really looking at new mentorship connections and opportunities, but the few I've taken have really been focused around people who are underrepresented in tech because I have very few to choose from, and so I'm happy for a reason to say no.

And so, you know, women are underrepresented in tech is an easy reason to say no. There are lots of mentors available, and so the very few I take on are focused on that because that's just what makes me a little more excited about doing good in multiple ways, not just helping a company, but help a company exist that might not exist if it weren't for that support that I can offer.

And I've got to tell you, it's a really good strategy because when you are investing in the underinvested, you find these amazing companies with people who are really passionate to make things work. And so I don't get to do a lot of that anymore because Glowforge is so demanding on my time, but when I do that, that's where the priority is for me.

COLLEEN O'BRIEN: And along these same lines, earlier this year you tweeted your current standard reply to being invited to a conference, which includes the question, "What percentage of speakers last year were underrepresented in tech?" What is the answer to that question that will get you to commit your time to a speaking engagement?

DAN SHAPIRO: And, again, I'm looking for reasons to say no, so this is totally selfish because if they're like, "Hey, it was totally not diverse." I'm, like, "Great, I'm not participating." And save my time. And so I can save those up for the places where I'm a part of a broader discussion, rather than just a part of sort of the dominant conversation.

The thing I look for is -- I usually follow that up by asking about a code of conduct. And so what I'm looking for is a place that tries to represent the world, not just one slice of voices. I want to be sure that, you know, I have, at times, been the token white guy, and I like that a lot better than sitting there just in a sea of people who are all the same.

And so what I'm looking for is a place where I can contribute something that's different to what's already there or a part of something that's a diverse range of experiences. So there's no like numbers or goal, but all too often, that's just the end of the discussion. It was not a diverse group before, and then I say, "Oh, looks like it's a real challenge for you to find diverse speakers, let me help by opening up a spot."

COLLEEN O'BRIEN: Yes! What a great answer! And beyond individual potential speakers at these conferences asking those questions, do you think that there are any other ways that we can pressure event organizers to prioritize diverse representation? Even just as attendees of these conferences or speaking engagements?

DAN SHAPIRO: You know, and let me -- both to answer that question and riffing off the former one, I'm no perfect idealist. There are events I have to go to, irrespective of who the speaker lineup is, because they're important to the business and I wouldn't be doing my job if I didn't attend.

So I can ask that question. I can harass, nudge, castigate, or gently remind the organizers that they need to do better, and then sometimes I have to do it anyway. And I'd say exactly the same thing is true of an attendee. There may be something that you have to go to, and the organizers are way behind the curve, but you know, your job is your job and that's something that you feel you need to do, and I don't judge anybody for doing that. But you may be in a position where you can say something about it.

And if it's an optional thing, if it's a conference that, you know, you have some discretion over, then that's great to say, "Hey, you know, some --" You get one of those conference invitations, you apply and say, "I'd love to go if --" and then they know. And they know that their business is harmed by not building events that represent the people in the wider world around them.

And I think that's just really powerful. And the more people hear about it, the more that they listen and care and pay attention.

I know there's one event that I declined to speak at because they didn't have a code of conduct, and actually I had a conversation where the head of the organization was a friend. And I called him up and I said, "Hey, you invited me to speak. You don't have a code of conduct, and I think that's a real problem." And he said, "Look, Dan, I'll be honest, I'm completely under the gun, I'm swamped, there's all this stuff going on. Is it really that urgent?" And I said, "I am launching Glowforge tomorrow to the world, I have been up for the past 48 hours working on getting this product up, and I'm calling you. So, you know, that's how important I think it is."

COLLEEN O'BRIEN: Right.

DAN SHAPIRO: And this is your event I'm calling you about. They now have a code of conduct.

COLLEEN O'BRIEN: Yes!

DAN SHAPIRO: So I think we can make a difference. As the people with the dollars, we can vote with our dollars and we can vote with our words about which places we want to patronize with our attendance when it comes to these events. And I think people listen.

COLLEEN O'BRIEN: Right out of college, you joined Microsoft, where you worked for five years before taking roles at Wild Seed and Real Networks. You then founded Photobucket, formerly Ontela, an image-hosting website, and then you founded Sparkbuy, a comparison shopping site that was acquired by Google.

So needless to say, you have an incredibly impressive amount of entrepreneurial experience, so much so that you wrote a book about it, *Hot Seat: The Startup CEO Guidebook*. What motivated you to share your experience and your advice with the masses?

DAN SHAPIRO: If there's one thing that drives me nuts, it's when somebody who has 20, 30, 40 years' experience, it's been decades since they actually put their livelihood and risk on the line, somebody who's had privilege for as long as they can remember saying, "Let me tell you, person straight out of school, or person who's risking their family's nest egg, person who's taking their first steps, let me tell you how it's done."

Because the world's very different after you've had some success, after you've had some measure of credibility. And I recognize that I was getting farther and farther from being able to give good advice to people who were starting companies, even as more and more of those people were looking to me.

And I wanted to say, "Look, you know, I'm not the one you want to talk to. I've forgotten half of what it's like to be doing this for the first time. You want to talk to the people who are going through the same struggle as you are."

And so my solution to this was, "You know what? I've had so many people generous with their time to give of their time and advise me, let me try and put that back." And so the book was a way to try and take sort of that advice and knowledge I'd been given and, you know, frankly, before I got too far away to have a real perspective about it, to try and put it down so I could share it with other people.

Because I've got to tell you, starting your fourth company is nothing like starting your first one. I could call investors and expect them to call me back. I don't know schedule a meeting and expect everybody to show up and be respectful and polite.

And, you know, it doesn't hurt that the white guy stereotype that those investors expect to see, because that's who makes up the majority of who's funded, it's so terribly unfair that when I wrote that book, I wanted to go -- first go back to my own experience of getting rejected and not knowing people or not knowing where to start, and then reach out to the tremendously successful diverse entrepreneurs who I know and tell their stories and how they went and made that work despite hurdles that were far higher than mine to cross.

So that book is me attempting to tell some of the stories that don't get told otherwise, stories both of successes and of failures of people who look like me and people who don't look like me, of sort of things people don't like to talk about, like how founders don't get along and it dooms companies or how companies get sold and the messy terribleness behind that that just, you know, winds up with a handshake in the front page of a news site at the end. To try and dig into that and share that so that other people could benefit from some of the wisdom that was given to me.

COLLEEN O'BRIEN: I really appreciate the book. We talk so much on this show about scaling mentorship, and I love that you were able to share those experiences in a way that so many more people can have access to them.

Dan, I want to be respectful of your time. I really appreciate you joining us on the show today. As we're wrapping up here, can you share where our listeners can find you on the Internet?

DAN SHAPIRO: Thank you so much for having me. If this was interesting at all, you can find me on Twitter @DanShapiro. You can see some of the neat stuff you can make with lasers at Glowforge, and you can find Robot Turtles, the board game that teaches programming to preschoolers on Amazon by looking for Robot Turtles.

You know, I just really appreciate the effort and love and passion that's put in on your part to help bring more people into this industry. It's painful to me to be a part of something that's so broken, and anything that I can do to help make that a little better, makes me rest better and feel better about how I'm spending my day. So thank you so very much for having me.

COLLEEN O'BRIEN: Thank you for the kind words, Dan, and again, thanks so much for being on our show today.

(Music.)

NARRATION: Cutting Edge, our take on stories in the business and technology world.

(Music.)

SONIA DARA: In this episode of Cutting Edge, we're taking a look at a study that was released on June 6th from the Boston Consulting Group -- or BCG -- and the startup accelerator MassChallenge, about the gender investment gap.

Katie Abouzahr, Frances Brooks Taplett, Matt Krentz, and John Harthorne authored a piece on bcg.com entitled: *Why Women-Owned Startups are a Better Bet*.

COLLEEN O'BRIEN: They're really not burying the lead there at all. (Laughter.)

SONIA DARA: Hope.

COLLEEN O'BRIEN: MassChallenge has backed over 1,500 businesses since its founding in 2010, and those companies have collectively raised more than \$3 billion in funding. So this portfolio that MassChallenge has provided the data for the study that BCG, then, took a look at here.

SONIA DARA: Yeah. And BCG's analysis shows that investments in companies founded or co-founded by women averaged \$935,000 in funding, which is less than half the average \$2.1 million invested in companies founded by male entrepreneurs.

COLLEEN O'BRIEN: And despite the throttled access to capital, you know, getting less than half of the dollars that male entrepreneurs are receiving, startups that were founded or co-founded by women generated 10 percent more in cumulative revenue over a five-year period. The numbers there are \$730,000 versus \$662,000 that male-founded companies were generating.

SONIA DARA: Yeah, this shakes out even further if you consider return on investment. For every dollar of funding that companies founded or co-founded by women receive,

they generate 78 cents. Male-founded startups generated less than half of that, just 31 cents.

COLLEEN O'BRIEN: Come on, guys.

SONIA DARA: Come on.

COLLEEN O'BRIEN: BCG did some qualitative investigation to figure out why, despite these findings, that the gender investment gap is so significant.

First off, women founders in their presentations are subject to more challenges and pushback from investors in those pitch meetings. Often, women need to do more in these spaces to establish technical understanding, for example.

SONIA DARA: And, second, women are generally more conservative in their projections, and ask for less than men. The article cites one investor, "Men often overpitch and oversell."

COLLEEN O'BRIEN: And, third, many male investors have little familiarity with products and services that women-founded businesses are marketing to women. You've probably heard that male investors might ask to have some time to discuss the product with their wives or even the receptionist at the front desk before they decide whether or not it's a good idea.

The article cites a *Crunchbase* statistic that 92 percent of partners at the biggest VC firms in the U.S. are men, so this is a huge issue.

SONIA DARA: Yeah. So, luckily, this write-up provides some recommendations for how to navigate out of this gender investing gap. First off, VC firms and investors need to be aware of their biases -- gender, socioeconomic, or otherwise -- and more strongly consider the business plan and projections.

COLLEEN O'BRIEN: The article also charges startup accelerators with the task of balancing their slates in terms of representation. From applicants through to the mentors coaching entrepreneurs, they need to make sure that they have incoming classes of startup entrepreneurs that look like the global population they seek to serve, and whether they need mentorship in manufacturing or software as a service, it's really important that the mentors coaching them through those businesses are, again, representative of the global population they're looking to serve.

SONIA DARA: Yes. And, finally, the findings suggest that women should be bolder with their investment asks, especially in these pitch meetings, and to get some coaching from VCs prior to that big pitch. You always hear that the men overpitch and oversell, so we've got to meet them at the table.

COLLEEN O'BRIEN: To read more of the details of this study, and for more specific steps forward on closing the gender investment gap, do a quick search for the title of this BCG article: *Why Women-Owned Startups are a Better Bet*.

(Music.)

SONIA DARA: Listeners, thanks for tuning into another episode of *Women in Business and Technology*. I know I, for one, learned a lot about Young Women Empowered, and I think it's really cool that we're able to host their STEM Education Day right here at Microsoft campus.

COLLEEN O'BRIEN: And needless to say, I was psyched to interview Dan Shapiro and learn more about his serial entrepreneurship and, of course, the inclusion practices that he's built into both his life as a speaker at conferences and his company, Glowforge.

SONIA DARA: Listeners, as always, please remember to rate, review, and subscribe to the show. You can find us on Apple Podcasts, Google Play, Spotify, YouTube, or wherever you listen to podcasts.

COLLEEN O'BRIEN: Our website is wibt.com, and if you have any feedback or questions, please e-mail us at wibt@microsoft.com, or tweet us @MicrosoftWomen.

SONIA DARA: Your mission for this episode, if you choose to accept it, is to contribute to a project created by a woman on a crowdfunding site. Some of the most popular crowdfunding marketplaces are Kickstarter and IndieGogo, so those are great places to browse.

Our former guest, Nina Baliga, the CEO of <div>ersity, just launched a project to build a platform that will connect diverse tech talent with trusted, transparent companies. You can find her project at gofundme.com/diversityintech.

(Music.)

END