collaboration and empowerment are the things that come together that lead to the most impactful kind of innovation and the most relevant.

We had an engineer from the U.S. Marines who was a resident there working on a deployable drone for the field that could be 3D printed, taken apart and put in a backpack to go out and find folks who needed medical care in the field without risking folks' lives. That person was in conversation with a costume designer from the film industry and she helped solve the problem of how to connect the wings to the fuselage with an electrical connector that would solve how to pack that up and put it together. It's the kind of conversation that happens in spaces where it's about community and collaboration. Those folks are talking to each other and that's what we are really driving at at the Pier 9 space.

>>Ellen McGirt: So how big, how many people are typically working there at the same time and how do they collide?

>>J.D. Sassaman: How do they collide? All over the place. In the office space, in the shops we have a wood shop, metal shop,
robot arms, CNC and digital fabrication. We have over 1,000 people with access to this space so any given day I would say we have between 10 and 50 folks coming in, using machines, learning how to operate machines and moving their research or their prototyping forward.

>>Ellen McGirt: All right, that's very cool. Sabeen, I want to get you in the mix here because one of the things that's really an interesting theme in this moment in time is that doors are opening for other people and particularly in tech and the work at AngelHack. People are not from central casting, and we are seeing some movement maybe not in the bigger diversity statistic numbers, but we're seeing some movement in the world. I thought you could talk a little bit about what you are doing and what you are seeing that's working.

>>Sabeen Ali: Absolutely, so what we do at AngelHack is we go around the world and we organize hackathons. And a hackathon is really a community space, like you mentioned, where anyone that is a developer, designer, anyone who has an app idea or an idea for any type of technology can come and join our event. And then they team up with other, you know, designers, other developers and we never really know what the magic formula is. It's always, you know, a group of misfits that get together and they create something that's absolutely amazing.

And what we've noticed over the past couple of years and through a lot of our own efforts is that our female attendance rate is rapidly increasing. So now we are at 20 percent for our global attendees, our girls and women, and age ranging from 17 to 54, which we are really proud of. It's a wide range, age range and we want to make sure that we're encouraging more women to come out. And this is really the grassroots effort of giving women an opportunity to come to the table, talk, contribute their skills and their ideas at the very starting stages of emerging technology.

>>Ellen McGirt: But I mean, this is, you are encouraging women and girls all over the world. You're going to some interesting places. Could you just give us a little snapshot of that?

>>Sabeen Ali: Yeah, absolutely. So we are organizing events in 92 different cities all over the world. We have a global competition that's coming up in April, and over the span of 12 weeks we will be organizing 50 hackathons. And then we pick one winning team from each one of these hackathons to put in our virtual accelerator, and after that virtual accelerator we actually fly those teams into Silicon Valley.

And what we are noticing is that 44 percent of the companies we accelerate and we fly over and bring to Silicon Valley—from places like Bogotá, Bangkok, from Saudi Arabia, from Gaza, Palestine, Kabul, and Québec and Montréal and San Diego—44 percent of these startups have female executives, so really we are seeing a massive change with our efforts. And then our company works with wonderful partners that support this system. They sponsor our events; they donate technology and credits. They come in and mentor all of our attendees. And this is really our ecosystem and how we are supporting the community and making it much more diverse.

>>Ellen McGirt: I want to talk a little bit about the community aspect of what you're
both doing, and, because it's fascinating to me the dream of bringing people who are very different from each other and giving them some basic coaching and tools and having magic happen is not how it ever actually works. So maybe together we could sort of pull out some best practices and what helps make people feel safe and how you can remove barriers and how organizations can become more courageous at trying it themselves. Because checking the box is definitely not working.

>>J.D. Sassaman: I’d say for our workshop. It’s been a series of really conscious decisions and moves. Typical shop culture comes with a lot of macho attitude.

>>Ellen McGirt: Right.

>>J.D. Sassaman: Yeah. So we’ve really paid attention to that and looked at how can we as the people running that space set the example and the tone for that culture to really be a learning space and to be asking questions and be curious. So constantly, not engaging with, “How can I impress you with how I've done before?” but “How are you doing that? Why are you doing that? I've done something related; let's talk.” And encouraging folks constantly, some of the things we do with the shop staff team to get there are literally physical practices. When we have our shop meetings and we do shop clean events, we get in a circle into a centering exercise to get present, like take a couple of deep breaths. It’s a little woo-woo, it’s a little California and it's uncomfortable.

>>Ellen McGirt: I just played a gospel video, you’re fine. So it's a safe space. [Laughing]

>>J.D. Sassaman: I don't know how many shop greasy mechanics you've met who are willing to stand there and do a breathing exercise with you, but it changes the tone in the room. And asking people to be present and tell you, “Go do a mood check. How are you coming in today? Tired? Frustrated? You had a call from your mom?” I don’t know. To be present and to be real about where you are and to set a very different tone every day about how we interact with people in this space, the impacts are real. Those are small dials to turn, but it changes what it means when you step up to a CNC machine with someone who is a brand-new user and say, like, “What you want to do on this machine?” not, “I'm going to show you how this works.” And those little moves end up having bigger and bigger consequences on the culture and space and how that moves forward and opens the door for folks to collaborate and have conversations. That's what I've found.

>>Sabeen Ali: Yeah, I absolutely agree with you. You have to be very deliberate about your culture. We’re in 92 different cities all over the world and there are different cultures in each one of these cities. Some of the cultures are very supportive of women in technology, and others not so much. So what we have to do is be very deliberate in our language and our marketing and really have to talk the talk and walk the walk as well.

A few years ago, when we didn't have statistics and demographics like we do now, we would do workshops. We had a whole theme for an entire year called “The Whole Developer,” where we were teaching developers that there’s more skills and value than their technical skills. And we were teaching them mindfulness and
breathing exercises. We brought yoga instructors to each one of our hackathons to create a much more type of environment where people are okay with being themselves and learning. And then we were also incredibly deliberate in the past year where we organized a hackathon series called “Lady Problems.”

>>Ellen McGirt: That sounds really fascinating. [Laughing]

>>Sabeen Ali: As you guys can imagine, we got our fair share of feedback, both internal and external. We wanted to organize a hackathon series aimed at female entrepreneurship and this was because we realized we had a lot of corporate partners that are very supportive of the cause and our team is predominantly female and we really wanted --

>>Ellen McGirt: Predominantly female, like 75 percent, right?

>>Sabeen Ali: Right, yeah. And so we wanted to do something to obviously support the cause. And, you know, the team came up with different ideas of what we could do a hackathon series called this-and-that, etc. etc., and someone just blurted out, “Lady Problems” as a joke and I said “Yes, yes!” And my Director of PR just looked at me and she’s like, “Oh my God, she is serious,” and I was serious! And I was like, “If we are going to talk about an issue, we are going to talk about an issue, and we will find out what people think. We need to be prepared, and before we do this we’ll do our research and make sure we have a really good rationale and look at social media plans.”

And what’s really interesting is that we ended up educating a lot of our corporate partners. So we had some partners that we went and pitched to and we said, “Hey, you said you wanted to do a hackathon to empower female entrepreneurs. Well, here’s our concept and here is what we are calling it: ‘Lady Problems.’” And they said, “Absolutely not!” And they said, “It is talking about the female menstrual cycle and that is disgusting.”

>>Ellen McGirt: Those are fighting words.

>>Sabeen Ali: They absolutely are. Or educating words, to be very honest with you. We knew what we were getting into. And so this was our opportunity to talk to our corporate partners and say, “Hey, by the way, every woman goes through this and you might think it’s disgusting, but some of us are dealing with it right now.” [Laughing] And, you know, you just have to educate your audience and let them know. Their perspective was, “We are protecting your brand and we are protecting our brand.” And our perspective was, “Well, we are creating a brand-new brand and what we are going to do is we are going to talk about what no one talks about. We’re gonna talk about all the taboo topics and do it in a sophisticated manner and make sure everybody feels safe and comfortable, but it needs to be done.” And eventually, we did get our corporate partners around and we got HP to be a big sponsor, Procter & Gamble and they also sponsor products as well. [Laughing]

>>Ellen McGirt: Nice synergy there.

>>Sabeen Ali: Yeah, so it worked out really, really nicely. But in conclusion, it’s really just be deliberate. If you are going to work on this issue, then work on the issue.
Ellen McGirt: I want to raise the issue of innovation again before we get into our “optimism” phase, and I'll throw to the audience for any questions. The buzzword is “innovation,” and everybody wants to be an innovator and everyone wants to move quickly and break things and we can argue they have broken quite a few things. But the argument is the innovations that get funded are not always the innovations we need. And the world is a very interesting, rich and interesting, marketplace. How do you think about that and how do think about persuading powerful people to invest in innovation that actually will have an impact? In any order that you would like. Or we could just be mindful together.

J.D. Sassaman: Well maybe I can speak on the end of what happens before the investment stage in the prototyping and the ideation, the iteration. What I can say is the same culture of community and of collaboration and of opening up the doors to a conversation is also the place where I think innovation becomes the most relevant. When you have diversity of thought and you have more voices in the room, what you get are deeper questions about why. And I see that happening in a really organic way for us on the shop floor. Because it isn’t always who's going to speak up in the meeting and say the thing. It's often who is going to share their ideas with you in a smaller in a one-on-one, in a different setting, because who gets to talk in the room is loaded. And I think making the space for those conversations to happen is a part of this.

So on the innovation and prototyping and developing the idea, making room for that diversity of thought, diversity of background, for the U.S. Marines and the costume designer to interact and actually hear each other I think is where that happens I see on the prototyping end. And then the questions become more relevant. Not “Is this super impressive?” and “Is this wildly crazy?”, but “Why, why are you going to make it? Why are you going to use that chunk of aluminum to do that?” So I see it on that end before it becomes the thing that gets invested in.

Sabeen Ali: And that's actually the mission and the entire premise of AngelHack is to create a bridge between Silicon Valley and the rest of the world so a diverse group of entrepreneurs have a chance to succeed. And the global competition that we host, we do pick a winner and those startups that come over from all of our events do get seed investment, etc. And year-over-year, what I've noticed is that it's always a team from abroad. We have yet to have a winner that comes from Silicon Valley. And we realize that.

Silicon Valley is creating innovation for the bubble, in the bubble, whereas the rest of the world is innovating for the rest of the world. So we are playing a big part to make sure we are educating investors and other accelerators and doing the work and doing the sourcing for them and bringing them right here for them.

Ellen McGirt: Anybody like to join us with a question or comment or an opportunity to talk your way into Pier 9, which is what I'm dying to do even though I don't have a single qualification to get me in. I'm going to keep scanning. Yes. Hi.

Julie Sweet: So -- many of our large clients are trying to do innovation within
their companies, even doing their own startups. I’m not talking about investing, but really trying to be innovators. So do you have any recommendations that are taking what you are doing and your top recommendations for the people in this audience and around the world to either serve or work at large companies?

>>J.D. Sassaman: The first thoughts I have on that are around being deliberate about what kind of processes are you going to support? So how is the innovation going to happen? Not what object do you want to walk out the door to show you’ve successfully innovated, but how? And how are you going to bring in those intersectional industries? I mean, I think we all see the collapse of multiple industries. We see the collapse between architecture and manufacturing, you know, we are seeing the collapse between digital and physical, fabrication, all of these things. How do you make sure the doors are open? And one of the things I would say for my team is what I also look carefully at is not what’s on the resume for the people who support and facilitate that space, but what’s not on the resume?

And for my most technical shop, the CNC shop that has the most industrial equipment, the lead in that shop, she has an MFA in sculpture. And that same mentality that was about interrogating material and process and attention to detail, she can take that from her sculpture background and apply it to CNC technology. And now she’s a fantastic lead and she facilitates that culture in a different way. So I think especially when we are interviewing and looking at how to build those teams in those spaces, not to look at, “Did this person get the title at their last employment that’s on their resume?” but “Can they demonstrate those leadership skills?” and can you ask them to show you is it in their family and their friend group socially, somewhere they have not included already that you can see those skills from them? So I think approaching those, the creation of those spaces deliberately and with a wider lens helps us get there.

>>Sabeen Ali: Yeah, and really quickly, I will just add on that the topic of “intrepreneurship” has actually widely grown quite a bit. And people are starting to really focus on the skills that they need in order to be more innovative within their companies or within their lives. And what we used to call “soft skills” are now suddenly becoming popular again. And I would say that organizations that are looking to innovate from within need to start focusing on some of those soft skills again and start valuing them. There’s a ton of exercises that you can do every day like focusing and centering to make sure that everyone is bringing their best and that you’re creating an environment where people do feel comfortable taking risks.

>> [Julie Sweet] Thank you.

>>Ellen McGirt: I want to end as we are almost out of time on the same question I asked the audience: How optimistic are you about the future? Maybe we can put the poll results up and we can compare. It’s close to Friday; I’m feeling pretty optimistic.

>>Sabeen Ali: Yeah, I’m actually incredibly optimistic. I’ve had the great fortune to be able to travel around the world and, again, be at the grassroots effort of innovation and brainstorming for what is going to be, you know, emerging technology. And I’m seeing a lot of exciting things, but what’s even more
exciting are the people that are in the room creating technology, the dialogues that are being had and the culture that's been created. It is no longer a boys' club. It is no longer an R&D room with tenured employees. It’s happening at hackathons with men, women, girls, and boys, and there are corporations that are supporting it so I’m incredibly optimistic.

>>Ellen McGirt: J.D., last word?

>>J.D. Sassaman: Optimism, hour by hour depending on what's happening. I think I definitely see projects and things that are taking root that give me a lot of faith. I just went to the Lesbians Who Tech conference last week. They set quotas for who's going to be represented both in the audience and on stage, which means I saw at that conference more LGBTQ folks, more women, more Latina, more black, more everybody in that space than I've seen in any other tech space. It's an incredible conference. That gives me hope.

>>Ellen McGirt: And you've got a new alliance. Please plug it?

>>J.D. Sassaman: Yeah, yeah I'll plug it. I'm working with a colleague to launch something we're calling The Workbench Alliance, and it's a professional organization to support women at the intersection of craft, technology and design. And by women we are inclusive of gender non-binary, gender non-conforming, trans, you are all invited. So we are looking at ways to create that community in a broader sense both physically and online to keep bringing each other into the conversation and careers and promotions and keep building our way there.

>>Ellen McGirt: Good luck. Good luck to both of you. Keep us informed of how you are doing. And thank you so much. And thank you all. [Applause]