

Creating a Culture of Innovation

June 15, 2023

FARNAM JAHANIAN: I'm going to make some brief remarks and then invite our distinguished panel to join us. As David mentioned, I'm Farnam Jahanian, President of Carnegie Mellon University. I'm thrilled to be with all of you and especially our distinguished panel. That's Jorgen Pederson and Marty Bates and Meredith Grelli, who I will introduce in a moment. And I am looking forward to a robust discussion about how the Pittsburgh Innovation ecosystem and its entrepreneurial culture, which is profoundly impacting the evolution of our region's business, workforce and communities, can create organizational change.

As I mentioned, in a few moments I will have the pleasure of introducing our distinguished panelists, but first, on behalf of our panelists and also Carnegie Mellon, I'm delighted to welcome all of you to Pittsburgh for the League of American Orchestra's 2023 National Conference. What I am hearing is that you had a successful day yesterday and you are continuing that today.

The last time this conference was held in Pittsburgh, as you know, was probably around 2004, and I am so excited that the American League of Orchestras and its members are back in our home town.

I would like to, of course, thank the board and the leadership of the ALO for selecting Pittsburgh for this occasion to serve as the host city. I also want to acknowledge the PSO for its role in attracting this important event to our town, to our region, especially its CEO, Melia Tourangeau, and Marty Bates, COO, of whom you will hear from in a moment.

CMU, as you can imagine, has a very special partnership with the Pittsburgh Symphony Orchestra. We have over 20 faculty members in our School of Music who actually are part of the PSO. And as David mentioned, I also have the pleasure of serving on the board. So it's a very symbiotic relationship that we've had with the symphony.

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As all of you know, or as many of you know, I should say, CMU is a global research university. Our interdisciplinary approach to education is pushing boundaries of technology, engineering, business, humanities and arts and sciences. The arts have always been embedded in our history and identity of



our university, and have been very much a part of the culture from the very beginning, when the university was launched in the early 1900s by Andrew Carnegie.

In fact, it was his vision to establish an institution that had these two pillars. One was industry, business, and you know, origins of science and engineering. And the other one was arts and creativity. And it is not a surprise that 100 years later, these are still two primary sort of anchors or missions of the university.

It's very intrinsic, of course, to who we are as an institution. It flows through our campus. If you visit our campus, it expands our innovation, our intellectual curiosity, our cultural reach, and including our exceptional School of Music and our College of Fine Arts, which collaborates very extensively with the PSO.

The PSO, I should tell you, is also embedded in a creative ecosystem that works to ensure the power of music persists in our community, in our region, and especially in a post-academic world, where urban environments are facing significant challenges. And those of you who come from urban environments I'm sure can attest to this.

And gatherings like this, of course, which brings orchestra leaders, executives, musicians, staff and administrators, are so important to learning new ways. And we learn from you as well, to engage audiences, build fellowships and share ways to innovate. In fact, given that the theme of this conference is about reinvention, innovation and cultural change, and when the PSO leadership asked me whether we would have this panel, I was delighted.

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Because, in fact, at this pivotal moment for symphony orchestras all over the country, probably there is no more fitting place or inspiring place to hold this conversation than here in our home town of Pittsburgh. And as all of you know, and I'll be very brief about this, Pittsburgh reinvented itself as a center of a new economy and a hub for arts and culture over the last 30 plus years. It has become a model for how the power of innovation can reshape a city, a region, and catapult us to a different global stage.

But this didn't happen overnight. And if you know about the history of Pittsburgh, you know that this happened over a couple of generations. Let me just briefly set the context for you before I invite our panelists to join us.



In the early 20th century, Pittsburgh was the industrial capital, not just of America but of the world. In fact, during World War II, our steel mills in our region were producing 95 million tons of steel annually. As the industry thrived, of course, so did our cultural assets, like our museums, galleries, symphony orchestra and so on.

In the 1970s and '80s, globalization shuttered, of course, nearly all of these steel mills in Pittsburgh in our region, and by the 1990s, believe it or not, Pittsburgh had lost about 30 percent of its population. Which in most places, this would be a death knell, but not here. In fact, the ingenuity and resiliency of the city, supported by a unique alignment of public, private and civic organizations, led to the renaissance of Pittsburgh, and that's something that I hope you are going to hear from our panelists.

And then in the 1990s, the city doubled down on the legacy of its economic strength, like in banking and finance and energy and manufacturing and higher education, and strategically started investing in other areas such as technology and robotics and computing and life sciences, and even startups that were spinning out of academic institutions.

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In fact, just a few blocks from here we have the Pittsburgh Cultural Trust, and the mission of the trust which was created was to essentially turn a 14 block red light district into an arts and entertainment and residential neighborhood, which is called the Cultural Trust in here. In fact, it's been one of the largest curated single nonprofit art organization in the world, in the country.

Of course, in the following decades, through a very powerful and unique—and I'm relatively new to the district. I've lived here only nine years, but I was actually blown away when I saw this unique and powerful alignment of public and private partnerships that allowed Pittsburgh to reinvent itself. Of course today, we believe that we're on the cutting edge of robotics, AI and automation, and of course, we're catalyzing the next generation of advances in manufacturing and energy like sciences, while acting, of course, as a training ground for tomorrow's artists and cultural change makers.

I hope what you are going to hear from these two panels will be helpful to you in terms of what Pittsburgh has gone through and how our industry leaders, our civic leaders and so on in this town think about the future of the city and the lessons that we have learned that we are happy to share with you.

With that, it is my pleasure to introduce our distinguished panelists. I'm going to start with Jorgen Pedersen, who is Chief Operating Officer of Sarcos Technology and Robotics Corporation, which 520 8th Avenue, Suite 2005, New York, NY 10018 1602 L Street, NW, Suite 611, Washington, DC 20036 **americanorchestras.org**



acquired RE2, the company that was founded by Jorgen over 20 years ago. Jorgen, please join me on the stage.

Meredith Grelli, who is on the faculty and is an Entrepreneur in Residence at our Tepper School of Business at Carnegie Mellon. I'll say a couple of more words about Meredith in a moment, but she was also a founder of Wigle Whiskey, which is branded on these bags, if you have not noticed it, and there is actually whiskey in there.

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And last but not least, Marty Bates, who is the Chief Operating Officer of Pittsburgh Symphony Orchestra. Please join me in welcoming our panelists.

Meredith, I will put this down, but I don't want you to think that I am not appreciative of all of the branding.

MEREDITH GRELLI: I was thinking you were going to take it under the table.

FARNAM: Well, thank you for joining us today. I am looking forward to this conversation. For the audience, the way that we are going to run this is, I have a couple of questions that I am going to start with and then a couple of more to follow up, but we really do want to make this be interactive at some point. So I am going to invite you to chime in and share your thoughts with us, as well as any questions that you might have for our panelists.

Let me start with Jorgen. Jorgen, of course, you have had a very successful career as an engineer and at the National Robotics Engineering Center here in Pittsburgh for a number of years, and later as an entrepreneur and founder of RE2, which became, of course, one of the first in Pittsburgh to generate substantial positive momentum towards the city becoming the hub for automation in the industry. I want to give you an opportunity tell us about your journey. Tell us about how you ended up launching RE2 as the spin out of the National Robotics Engineering Center. So I will turn it over to you.

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JORGEN PEDERSON: Sure, thank you, Farnam. So to rewind to 1990. I came to Pittsburgh with one purpose, robots. And you know, why robots? I was 18 years old and they were just cool. And that



pretty much sums it up. And there was no better place, especially at that time, to go learn how to build robots than at Carnegie Mellon University.

And it's interesting. On my first day at Carnegie Mellon, and I won't share too many stories, but this one I wanted to share. There was a discovery about the uniqueness of Pittsburgh. As I sat there looking across Forbes Avenue, which is two lanes going this way and two lanes going that way, to enter the campus for the first time, I noticed a car stopped. And I was there with my mother at 18 years old going to cross the street, and they had a green light. But they stopped and waved us across.

And being from Philadelphia, naturally we assumed that they are egging us on and they are going to take us out. But then I realized, no, this is a unique quality within this town, kindness. And it is perhaps the foundation of what made this town be so resilient. That kindness creates community, and that community creates innovation, and that innovation creates success. So from day one I recognized the difference that was in this city versus the one that I grew up in.

And during my undergraduate years, I spent most of my time outside of the classroom, learning how to build robots. I was very entrepreneurial from day one. You know, yes, the theory was good, but I wanted to get right to building robots as soon as I could. Upon graduating from Carnegie Mellon from my undergrad I got an electrical computer engineering degree and I was hired by the National Robotics Engineering Center, which was going to be the new foundation to take technology out of the university and help transfer it into industry.

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So I was one of the original 12 people at the NREC. There are a lot of stories I could share there, but the purpose was to create innovation to disrupt industries like construction and agriculture and mining, and really revitalize those industries. So a lot of great knowledge learned there over the years.

So you fast forward to 2001. I would love to tell you that I had this beautiful, concrete plan of how to build a robotics company when I formed RE2 in 2001. But the reality is, I simply knew I just wanted to build robots that made a positive impact on the world. And so we incubated within the National Robotics Engineering Center, and we just explored. We did contract engineering, trying to find what is that killer product that is going to transform the world with robotics. And it turns out that every single one of them was before its time.



But in 2006, we applied to this government program called, The Small Business Innovation Research Grant. And there, they provided you with three things—a customer, a need and funding, right? And it turns out, this was at the height of the Iraq and Afghanistan war so there were a lot of road side IEDs. People were having to go up and deal with that. And the grant that we won was to build a new robotic arm, a mobile robotic arm that could go and defuse that bomb and keep people safe. It turns out, that set the direction of the company from there out.

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And that defines who we are today. We are a mobile manipulation company that can go outside beyond the factory floor. And that focus created tremendous growth over the next decade and a half. There is a lot that I could share over the next 20 years, but I'm only going to call out two.

The first, and the risks that I took as an entrepreneur that I think paid off in spades. The first was in 2013. We were primarily, because we were doing road side bombs and saving lives, 95 percent of our business was in defense related. And in 2013, a sequestration was issued and it had a tremendous impact. I was forced to lay off some of my staff.

But what I recognized is the strength of a company is its people. So at my own personal risk, I went out and took out loans. I got convertible debt, leveraged the line of credit for which I was a personal guarantor, right? You know, a million dollar line of credit that I was on the line for, simply to keep that group of people together during these hard times, while I went to raise a Series A and tried to convince someone that we're going to go create the products of the future.

We were successful. We did raise a Series A in 2014, and I retained that key talent. And that key talent is what led to the innovation that created our success all of those years later. And more importantly, [most] of those people are still working with me today, because of the way that I treated them.

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The second risk that I took was I had a strategy for world domination and you know, selling a gazillion robots within the Defense Department to make these bomb diffusing robots. We bid on hundred million dollar contracts and I quickly learned that at that time, a 50 person company was not going to disrupt the incumbent industrial bases of this country, you know, especially in that niche market.



So I took a risk and said, let's pivot. Let's redirect all of our resources and go after commercial. And it turned out that that pivot was the correct thing to do, because the world was finally ready for the innovation to disrupt medical, to disrupt solar field construction, to disrupt aviation. And that, after doing that, we doubled in size within two years and had tremendous growth. And that grown led to the acquisition of RE2 by Sarcos for \$100 million in 2022.

And as I look back at what led to that, I realize that the guiding principles that I had set for the business many years ago were the guiding principles that shaped my entire journey. And those guiding principles were three. There were several, but there are three that I want to call out.

One, people first. Second, innovate through robotics. Third, make a positive impact on the world. And that's what I live by still today.

FARNAM: Thank you, Jorgen. I am going to come back and call off of that the role of Pittsburgh and its place in your success.

JORGEN: Yes.

FARNAM: But before we go there I want to turn it over to Meredith. Meredith, you founded and led two craft beverage companies.

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In addition to your entrepreneurial work that you've done, you are an author, you are a real estate developer. In fact, I read in your bio, which I did not know, that you were a brand manager with Kraft Heinz and a redeveloper of distressed properties in your earlier life before your launch. You studied at Le Cordon Bleu in Paris. A very, very diverse background. Can you tell us a little bit about your journey and how these diverse experiences that you have had influenced the launch of Wigle Whiskey. And then I can follow up and ask you about what is the competitive advantage that you have.

MEREDITH : Yeah, absolutely. So my path was not linear. And I think we are able to lead effectively those interests and experiences into the foundations of the company. From a community and economic development perspective, we really built the brand around this regional heritage. Pittsburgh was the birth place of American whiskey, and so part of the mission of the company was



to bring back, to resuscitate this American history and this regional pride as we continued to reinvent the city and evolve our own understanding of our city.

We put our money where our mouth was and invested \$10 million into sometimes forgotten neighborhoods in the city of Pittsburgh, creating community assets and sites where people could come and learn about this regional heritage in sort of entertainment kind of ways. We worked to build a new agricultural supply chain across Ohio, Pennsylvania and New York of organic grain farmers, and ultimately became the largest purchaser of organic grains in the state, and it helped to support our agricultural community and grow it. And of course, we were able to push the boundaries on a pretty staid and boring spirits category that hadn't changed a heck of a lot in, oh, 100 years.

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So I would argue, in fact, that state of [leading of threads] that you were so good at is really the heart of innovation. Innovation research shows us that only the most compelling kinds of innovation happen at this intersection of seemingly disparate industries, ideas and technologies. And while it is really hard to predict who is going to be a successful entrepreneur, understanding someone's capacity for this associative thinking, this ability to connect seemingly disparate ideas, is actually a pretty good indicator of how strong an innovator that they might prove to be.

So it's a skill that we can all build, for sure. You know, a famous example of this that is often cited is Steve Jobs. He took calligraphy in college at Reed College, which seems like a pretty niche-y interest, right? But he applied this understanding of this art form to his products in a way that differentiated his products from the competition, right? And it changed the way we all live our lives now.

So in that spirit of connecting seemingly disparate ideas, I want to argue that whisky and symphonies have a lot in common. Three ways. Okay, let's see if you get onboard with this. You can tell me.

Okay, painfully long term planning. Marty says he's thinking three years out generally, right? From a programming perspective. I have Marty beat, because the whisky that we make today sits in barrels for eight years. Eight years. That's painful. That is painful.

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Which brings me to our next commonality, money, or lack thereof. Both are very capital intensive industries, right? Whisky and symphonies. And we, like every entrepreneur who has ever walked the Earth, do not have enough money to do all of the things that we really need to do, right?

Third, last commonalty, our audience. When I started Wigle 13 years ago, when I asked people, who do you think of when you think of whiskey, they would say to me, hmm, an older gentleman sitting on a leather couch, maybe smoking a cigar. Maybe that sounds similar to people in the audience of opening night at the PSO. I don't know.

So I think that we have got a lot in common. It's like this idea of the challenges that we faced, we were able to grow into one of the—we're in the top 10 percent of craft distilleries nationally. We are able to achieve significant distribution. We are seven years the most awarded craft distillery in the country by our trade organization. One of five distilleries honored by, or one of five alcohol producers in the U.S. honored by [UNINTEL] Foundation for our innovation, in large part. So I think we can do it together, yeah?

FARNAM: If I can follow up, aren't there examples of the specific risks that you took that has allowed you to sort of maintain the culture? Because the whisky industry just doesn't sit still. You have many competitors out there. Are there examples of risk that you took that allowed you essentially to enter a very traditional industry and yet turn it on its head?

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MEREDITH: Yeah. So I was pretty young when we started the company, and so I was risk tolerant in a way that only the naïve can be. So we knew we were entering this very staid category. When I walked down the whisky aisle at that time there were no whiskeys that were built for me as a consumer. That was clear. And we knew that there were populations then that had been entirely left out of the communications of the category, really for decades. And the laziness of those companies meant there was opportunity for us, right? To create something new and different.

The traditional way that you would create a spirits company at that time is you would find some property in the exurbs as cheap as you can, right? Focus on a single product, produce that as efficiently as possible, and then distribute that as widely as possible. We looked at that model and said, that model just isn't going to work for what we want to do because our consumers, they are not even walking down the aisles of the store that we need them to walk down to pick up our products if we were to make it that way.



Instead, we need to create a business model that promotes aggressive inclusion. We need a high touch approach where we get you in our doors, in our clutches, and we create educational, experiential marketing opportunities where you can't help but, after spending some time with us, leave with a bag full of goodies. And we need that direct interaction with you to do it.

So we started building out our first site, our main production distillery which is right down the street, really, in the middle of the city in the strip district. And we hired an incredible architect who actually teaches at CMU now and Chen to help us design us, with education in mind.

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It was bright. It was beautiful. Built for educational programming baked right in. And our thought was that we were going to bring people right to us. Does this seem like a good business model to you? Would you have done it?

No one thinks that it's a good idea. [Laughter] You guys were smarter than I was at the time because I thought it was a great idea. There was just one fatal flaw to it, and that was that this model was illegal. At that time, you could not directly sell spirits—a manufacturer could not sell spirits directly to consumers. So while we were building out our distillery, while we were having our customer stills crafted in Munich, while we had our Hammermill built in Buffalo, we were also lobbying the state of Pennsylvania to change the laws to allow us to operate our business model as we believed it needed to be operated.

So we got the Senate legislative committee down to Pittsburgh. We took them on a tour of our completely built out distillery. And I think they felt so bad for us they thought, these people are really up a creek, that the next day they held a hearing at the Heinz History Center, passed our bill, and we were able to open our distillery. Which was the first direct to consumer craft distillery in the state since Prohibition, the first in the city of Pittsburgh since Prohibition and all of that stuff.

But more importantly, it created a new industry in the state, which is now flourishing and doing, we think, quite a bit of economic benefit within Pennsylvania.

FARNAM: Speaking of flourishing, if you go to neighboring counties in Pennsylvania, there are distilleries popping up—

MEREDITH: Everywhere.



FARNAM: In rural areas all over the place.

MEREDITH: Thousands of distilleries now. Amazing.

FARNAM: Absolutely, yep. Marty, let's talk about you a little bit.

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You were a global corporate business executive earlier in your career, working for companies like GE, first starting as an engineer, and then getting into the operations, strategy, merger and acquisitions in companies like Alcoa and McKinsey. A very impressive background, obviously, in operations, in mergers and acquisitions, before joining PSO coming back to your home town as Chief Operating Officer.

So what drew you to this industry? And how did you get involved with the Pittsburgh Symphony? And I have a quick follow up question for you, but I'll come back to it once you tell us a little bit about your journey.

MARTY BATES: Well, I'll keep this brief. But I've been hooked on music since I was a kid, and I had the chance to be given an assignment in graduate school back in the '90s to give an informative presentation, so I decided to give a brief history of a thousand years of Western music, cherry picking a bunch of sound clips during this monophonic chant, going through to, you know, 20th century sensibilities.

And weeks after that presentation, I had classmates come up to me and ask me for the set list and ask me for the timeline that I had used to set context when I shared this evolution of music. And it was revelatory for me, which is, as a classical music lover you are often in a relatively small company. And to have a general audience, which is just classmates at business school, come up and show genuine interest in this, it really stuck with me. And 20 years later it had continued to cycle through, and I thought, well, why don't we try to replicate that, but this time do it live?

And so some PSO musicians and I put together a live version of that, and we called it Discovery and Drinks. And the response from the 50 or 60 people who came was overwhelming. And it demonstrated to me that this art form is compelling, it is just unfamiliar to too many people.



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And I think, just like the whiskey industry, it's straddled with a lot of perceptions that are not doing it any favors, and it is an opportunity to attack that. And so then I wound up joining the board of the symphony after volunteering and doing some of these chamber music events, and then in early 2021, the opportunity arose for me to make a career change. And trying to bring that type of rejuvenation, audience building, innovation into a highly successful organization like the PSO was an opportunity I just could not pass up. So here I am.

FARNAM: Let me follow up with that. The origins of PSO date back to over a century ago. In fact, before the 20th century. And in fact, the CMU and PSO have shared the same benefactor. Andrew Carnegie had played roles in both of those organizations.

Through the generations, but especially if you think about COVID, the impact of the COVID attack on orchestras around the country, how has a focus on innovation helped the PSO evolve and drive through the years? But especially during the past three or four years, as we've dealt with this local pandemic?

MARTY: Well, I'll give you one example. You know, challenges burning platforms, whether it's COVID, whether it's the financial state of the organization or the industry that you are in, those are opportunities for you to then take risk. And during the pandemic, a simple thing that we, like many orchestras did, was we converted to virtual programming. And one of the most surprising things was the reach that our school time programs had.

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So you know, like many orchestras, we offer free concerts for schools. Come downtown, go to Hines Hall. We started just to put those online because we couldn't have audiences. And we were amazed at the schools in Canada and across the Midwest that were tuning into or school time concerts. So that has now turned into a question for us, which is, how do we build on that and turn those into multi-language opportunities?

Trying to energize new audiences coming out of the pandemic, we have had to ask ourselves, what is really going on in terms of the experience? In terms of somebody saying, well, there is nothing there for me? And so we've created new concert experiences. Not necessarily changing what we're playing



on stage, although certainly trying to expand that and enrich it, but keeping the same great performances but wrapping a different experience around them.

And that's the PSO Disrupt series as an example of that. We've continued this Discovery and Drink series. And these are very much aimed at taking the great performances and the great music that we love and packaging it in a completely different way. In some ways it's the same great whiskey, but it is now presented to somebody in a completely different way.

And those are just recent examples that I would say are the beginning of our effort to try and create a total transformation of both the PSO, and hopefully an example for the industry.

FARNAM: Thank you, Marty. Jorgen, let me go back to, we talked about the robotics industry and the automation industry. Our audience may know this, that Pittsburgh has become the center of essentially this industry's universe in terms of the last couple of decades. In fact, there are more than 100 robotics companies that have been launched in the Pittsburgh area, in our region, just over the past two decades.

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Thousands and thousands of new jobs that have been created, and of course, the multiplier effect of that on the economy, on the service industry, on people who go to the symphony, who rent apartments, who buy houses, is undeniable. So the economies are very much interconnected.

But context matters. You talked about how you launched RE2. How your experience as an engineer has been of a founder and a CEO of a company. But context matters in the sense that you did all of this in Pittsburgh. I'm just curious, what are some of the elements that are here in Pittsburgh's ecosystem that enabled the success that you've enjoyed? Not to take anything away from your own accomplishments, but what are some of those ingredients? What is unique about Pittsburgh that enabled the success of your company, of your entrepreneurial activities?

JORGEN: No, there is a uniqueness to Pittsburgh. I've traveled across the world. I have been to many cities, and I've never found another city that has the same qualities as Pittsburgh.

FARNAM: Please don't be offended by that statement.



[Laughter]

JORGEN: Yeah, yeah. And not that there aren't other great cities, yes. But I think it's good to look at what is working for a city, right? And you know, I wouldn't have succeeded, I don't think, if I didn't have the support structure of this region. And it came in many ways, right?

Naturally, you have universities, you have Carnegie Mellon, that is creating that critical talent that you need. That for me, through the National Robotics Engineering Center, have provided a mechanism to incubate. I got access to world class minds that were not a part of my company. I got access to machine shops. I got access to IT equipment. I got access to customers coming through the building, right? The ability to incubate and leverage the university was strong.

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But then there are other support organizations within the town, too, that were also critical. You had innovation works, which provided business coaching. Because I was an engineer and had no idea what I was doing, right? But at least I was smart enough to pay attention and to learn from others.

And then I also got that seed funding, right? You know, number one I'd put myself in financial risk and got convertible debt. That was one of the areas where I got it. But you have other organizations like the Catalyst Connection, who provided work force training. And also getting from underserved and under represented communities, going back to making a positive impact on the world, right? We were able to get talent from those communities and figure out what is really important. We tapped into the local venture capital market, who seems to be more understanding of robotics and the risks associated with robotics, because it is very high risk, right?

But I think the most important thing is the ecosystem itself. When I started RE2, there was the Pittsburgh—you know, I was one of six companies. And today, through the Pittsburgh Robotics Network, there are over 100 robotics and AI companies, and it's growing.

But what is the most important is the community. And this is going back to that statement about kindness creates community, and a community creates innovation. If it weren't for the community, I don't know if we would have made it. We help each other.

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There is something unique here. And I think this is, perhaps, a key reason why this rust belt city transformed itself, is because of that community. We would machine parts for other robotics companies even if they were kind of competitive with us, just to help them out. It really was an all ships rise with the tide mentality, right? Let's everyone help each other rise.

And then there was also a great network of mentors in town. There were other folks that had created these high tech companies, grew them, went through an exit. You know, you had Dave [Luini], you had Craig Markovich, you had John Rucker. These are all powerhouse—Rich Lunak—mentors that were there and available. And because going back to that kindness and community thing, were willing to give you their time. They were selfless. They were, I'm here to help you. And that's a uniqueness.

And then lastly, there's something that, because of the steel industry, I think that there is a work ethic in this city that I haven't seen in other places. But this is not to say, oh, Pittsburgh is the best city and town. What this is meant to say is, what are those key things that enabled this really nascent market of robotics and AI to become the world capital for robotics and AI? And it was that community. And whether you can take that blueprint and apply it to the orchestra, right? You can apply it to other industries and figure out, what are—you know, it is not going to be a one to one mapping, but doing critical thinking, and thinking through, what are those key elements that would be important for my industry to grow within my city?

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I think that would be a great exercise to do. And look from and take the lessons learned from that success.

FARNAM: Thank you. You know, a number of times our panelists refer to Carnegie Mellon. I have to tell you that while I appreciate the spotlight I'm seeing here, actually it turns out that there are a number of fantastic academic institutions in our town. A lot of folks do not know this, but there are 80,000 college students that are actually a part of our community, from the University of Pittsburgh, Chatham, CMU and a number of others.

The reason why I bring that up is there is an example that I want to share with you. We have an evening. I mentioned that obviously, I have the pleasure of serving on the board, and several, a couple of dozen members of our faculty are also members of the orchestra. But we actually annually have an event called, "CMU Night at the Symphony." And what it does is, we invite obviously—we have a terrific College of Fine Arts which has music, drama, design, architecture and art. But we invited students to come and attend either at a very discounted rate, which we subsidize at the symphony, or actually for our students from our College of the School of Music, it is free to them. 520 8th Avenue, Suite 2005, New York, NY 10018 1602 L Street, NW, Suite 611, Washington, DC 20036 **americanorchestras.org**



And that evening is an evening where you invite, essentially, the community to come and be a part of "CMU Night of the Symphony." We started this several years before COVID. Then, of course, there was a pause, and then we started again last year, and we have done this now for two years after COVID. I have to tell you, it is such an amazing event. Because if you want to talk about something changing the profile of individuals who go to the symphony, you have to come to that.

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And it's not that—and the most important thing here is that it's not that unlike students that are in the College of Music or our College of Fine Arts go to it. I have engineering students. They all dress up. And you know, young men, young women in their 20s and late 20s, early 20s, they dress up. From our computer science, you know, geeks like Jorgen and myself at a much younger age, and our engineering students, our business school students, they all dress up to go to the symphony, because it really opens up a new form of entertainment, a new form of cultural experience now.

It's been so successful that we are looking at how we can expand it or replicate it. And this is really going back to what Jorgen was saying. You have to look at all of the core assets that you have in a community and see how you can essentially connect those dots.

So with that editorial comment, I want to go to Meredith. Meredith, you partially alluded to this, that when you started Wigle Whiskey, Pittsburgh started to gain some recognition as a place for chefs and restaurants and [UNINTEL] and so on. But it is not where it is today. It was a much, much earlier stage. What was—and I think you were alluding to this partially—but what was Wigle's competitive advantage? And how did Pittsburgh contribute to Wigle differentiating itself in a very sort of an old industry, if you will?

MEREDITH: Yeah. Well, certainly as an entrepreneur, you know one of the things I am always trying to think about is, how can we punch above our weight? How can we appear bigger than we actually are, perhaps? And one of the ways that we did that was by embedding our brand and our story into a larger regional story. So Pittsburgh has always been an epicenter of alcohol innovation. [Laughter]

[0:44:00]

You are going to thank me. We invented the pull tab, Alcoa. It debuted on Iron City Beer cans. I mean, yes, you are welcomed. I know, I know. But more importantly for us, and you know, the company that I started was, Pittsburgh was the first place of American whiskey. So for the first 200 years in 520 8th Avenue, Suite 2005, New York, NY 10018 1602 L Street, NW, Suite 611, Washington, DC 20036 **americanorchestras.org**

American history, if you were drinking in America, you were most likely drinking that stuff called Monongahela rye whisky that came out of this region. At the height of whiskey making we were producing a half a barrel of rye whiskey for every man, woman and child living in America. Yep.

In fact, this is a quick aside. Because this is a sort of a CMU oriented panel, one of our most famous distillers was a guy named Andrew Mellon. Who was also Secretary of the Treasury during Prohibition, which made him Chief Prohibition Agent and also inconveniently, the owner of America's largest distillery, just south of Pittsburgh. So he did what any smart politician would do and granted himself a medicinal whiskey license. [Laughter] And sold somewhere around \$4.5 million worth whiskey to Americans during Prohibition.

FARNAM: And by the way, that's the same Mellon that is in Carnegie Mellon.

MEREDITH: Yeah, and we're appreciative of his philanthropy. However, we're not going to interrogate how he got the money. [Laughter]

But so you know, we built our brand, really, around this story telling. We found out that Pittsburgh is very proud of its past, and there is a risk there of getting bogged down in you past. So the tension for Pittsburgh is always, how do you celebrate the past and innovate going forward? And that was very much the tension for our company. We wanted to celebrate our whiskey heritage, and in particular this pivotal historic moment called The Whiskey Rebellion, which was the first test of [UNINTEL] power, and it happened here in Pittsburgh. But also keep pushing the bounds on innovation.

[0:46:01]

So by tying ourselves to a story that was larger than us, tying ourselves to this sense of regional pride, we were able to, I think, grow ourselves beyond what we otherwise could have.

The other way I think the Pittsburgh piece really made a huge difference for us is really similar to what Jorgen and President Jahanian have already mentioned, and that's the collaborations and partnerships. Pittsburghers seem very ready to collaborate, in even unlikely ways.

So an example of this. Immediately really, after we opened, we wanted to figure out a way to do some story telling around this whisky heritage, which Pittsburghers were not really aware of. And so we wanted to do a party around the historic timing of The Whiskey Rebellion. And this was just a few months after we opened, so we didn't really know what we were doing.



We had a paid staff of three people, and we went to seven cultural institutions in town and said, here is what happened during The Whiskey Rebellion in the 1790s in Pittsburgh. Here are all of the wild things that happened. Will you help us come up with ways to represent this, experiential ways, to the general public?

Every single one of them should have said, we don't have the time. We don't have the resources. You are asking us to do this in a month. No way, Jose. In fact, every single one of them said yes. And we had organizations like the Carnegie Science Center, dance organizations like Attack Theatre, installation art museums like Mattress Factory, all come together and come up with brilliant ways to engage the general public in this piece of American history, and literally help us build the company and the brand. So that was phenomenal to us, and a very early and impactful instance of how the community was going to get behind the company.

[0:48:05]

FARNAM: Thank you, Meredith. Marty, let's talk about the symphony, and the competitive nature of entertainment and culture even within it. There are individuals in our town that have other options for their cultural enrichment and for sources of entertainment. So it's something of a pointed question. How should orchestras consider their musical selection as a way to differentiate themselves and gain attention in a market like ours, where the population isn't growing significantly?

So it is a pretty stable population, but of course, it is an increasingly younger and younger population. As you know, the average age in Pittsburgh has fallen quite a bit, just because of the new economy that's been created. So what is PSO doing to stand out in our market?

MARTY: Well, let me ask the audience a question. How many heard the Firebird last night? Most everybody. And how many people think that if you took a stranger off the street and sat them down to experience that, that they would say, wow, that was pretty good? All right. I mean, I think from a orchestra culture standpoint, our biggest challenge is replicating the types of things that we've just heard about. Which is being open and being connected and being story tellers and going on a process of discovery.

Because there is no shortage of ideas. In fact, we are overwhelmed with ideas. We have very creative organizations and that creativity leads to an endless list of ideas. But you know, what ideas do you pursue? You know, innovation is not just the idea, it is also the implementation.



[0:50:05]

And picking the idea ahead of time and thinking, well, that is going to be the one, and we're going to go implement that, I don't think that is what we find in successful innovation. We find a sense of being open and going on a process of discovery. And being open also means being open to the ecosystem that you are in and how you collaborate with others. So it is not by accident that we had the ballet on stage with us last night. That was a deliberate attempt at us trying to bring our organizations together to create an enhancement.

And so I think that the hardest things for us as an organization, as an industry, is that we have a 100 year history, and that 100 year history has taught us how to execute a season. Which is, you take the template from last season and you just update it for this season, right? And you know, how do you break out of that?

Well, we have no shortage of ideas. So we could all sit around and look at each other and throw the ideas out. But until you have actually reached out and opened yourself up with genuine curiosity and enough humility to listen, I think you are not going to be on that process of discovery. And you know, for us, the examples that we saw in the concert last night of having living composers, and we also, if you had noticed, had cues on the side screens to help the audience understand the piece. Again, a very deliberate effort.

But one that, in an organization that is built to take last year's template and propagate it forward, took extraordinary effort, because you have to find the person who is going to create the slide. You have to find the person who is going to be open to the feedback on what worked well and what didn't work well.

[0:51:58]

You should all know that what we saw last night was the second version of that slide show. The first version of that slide show did not have the text fading out in between the cues, which I and many others found distracting. You know, so being able to have the humility to listen and then make those adjustments and continue on that process of discovery.

So I don't know that we have a competitive advantage against other forms of arts and entertainment other than the amazing performances that are available on stage. And again, I think for us the challenge is, how do we open ourselves up to make sure that those performances are wrapped around experiences that include learning, that include onboarding people, giving them on ramps, 520 8th Avenue, Suite 2005, New York, NY 10018 1602 L Street, NW, Suite 611, Washington, DC 20036 **americanorchestras.org**



listening with a certain amount of humility, and allowing other people to participate in that process of discovery with you? And not just you and your team generating all of the great ideas that you think that you have, and then throwing them out there.

So I'm not sure that I have a better answer on what makes us competitive, but you know, certainly exercising genuine curiosity and humility is, I think, going to be a key piece of our innovation culture going forward.

FARNAM: As you were talking, Marty, it occurred to me that those of us who come from a technology background, like Jorgen and myself, you know we often talk about the innovator's dilemma, where you are successful at a particular way of doing something, and you grow as an organization. And you may have done this for 50 years, 60 years, many decades. But then the challenge is, how do you innovate and get into potentially a different form of conducting whatever it is that you do for business? Because you are worried about potentially leaving behind the recipe that has made you successful, and experimenting with something new by taking some risks.

[0:54:01]

But often, organizations—and I don't want to sound like a fatalist, but organizations that get into trouble are the ones who are so risk adverse that they are not willing to try new things. And then somebody else comes in and eats their lunch, which, putting it into really simple terms, that's what an innovator [UNINTEL]. And I know, Jorgen, you have probably experienced that in the businesses that you've been involved in. Those of us in the technology business have all experienced it.

But I don't think symphonies are any different in that sense, because there is a recipe for success that symphonies have executed and have implemented over the years. It's been the source of their success. And with all of the challenges the question really becomes, how do you innovate? How do you take some calculated risks such that you can get ahead of potential competition? Not necessarily with other symphonies, but other sources of entertainment and other sources of cultural innovation.

So your response was what triggered that thought. I don't know if any of you have any thoughts you want to add to that.

JORGEN: Yeah. The entire journey for us was filled with risks. But what allowed us to take those risks was a foundation of a core business that we excelled at, right? So I don't know what the analogue is



within the different markets, but I'm sure that there is one very lucrative element that is just almost a given, year after year. And that should be maintained.

But that is the foundation that allows you to take those risks, and perhaps even pivot, as I did in my journey. But maintaining that core and then deliberately forcing yourself to do critical thinking of, how do I disrupt myself? How do I disrupt this industry? You know, how am I going to get robots into the symphony? That is the main thing that we've got to figure out by the end of today. [Laughter]

[0:56:06]

Well, I think I know how we're going to get there. But you know, it's really that you have to maintain your core in that foundation. That is the bread and butter, and you have to hold onto it. But to President Jahanian's point, if you don't force yourself to take those risks and think outside of the box, you're going to stagnate, right? And I think that's the key to allowing it, is maintain the core and then diversify and try multiple different things. Just like I did all of those years.

But like I said, in those first five years, not a single one of those opportunities panned out because the world wasn't ready for robotics at that time. But eventually, because we kept pushing, guess what? In 2018 the world was ready for robotics, and that is when everything triggered. But because we kept driving and driving, that's what allowed it to happen.

MEREDITH: I agree with that. I think if I were sitting in an esteemed organization like PSO or any of a number of organizations in the room, you know I think a couple of opportunities for how to approach innovation with an incredible history, an entrenched culture perhaps, and a strong board, a couple of potential strategies you might steal from the business world could be to focus on strategic partnerships and go even deeper and even more niche.

Because sometimes those really niche-y groups, they are handling populations that are too small for you to care about now, but those groups might grow into audiences that become big enough that you need to care about them once they are there. But those partners can do the hard work of helping you collect and gather and understand those groups, so that when they are big enough, you know how to work with them and appeal to them.

[0:58:14]



Another thing you could steal from the business world is the idea of an incubator. Incubators are not a sure fire way to success. There are a lot of ways that they can fail. But that could be creating a protected space within your organization for innovation; a dedicated person, maybe. And if you go that route, I think that there are a couple of things that you would have to keep in mind.

You really have to safeguard that person, meaning that that person has a direct line to someone like Marty. They have a direct line to the COO or the CEO and report to no one else. They have different metrics that they are goaled on than the rest of the organization, because they are not going to be as maybe margin accretive or as revenue efficient or productive as the rest of the organization is. And they have to be gifted the ability to create their own culture. And one that could be quite distinct from the larger organization.

So those are, you know, you have to innovate just like, I think, the average Fortune 100 company was. You know, 75 years ago they would stay on the Fortune 100 for decades. Now it's eight years. The cycle of innovation just continues to become faster and faster. So we are all in the same boat.

FARNAM: Marty, I'm going to open it up to the audience to see if they have any thoughts to share with us or any questions for the panel. Are there any more thoughts from you before we open it up to the audience?

MARTY: No. I would love to hear what is on people's minds.

FARNAM: Go ahead, please. And if you don't mind introducing yourself first.

DAN GROSSMAN: Yeah, I'm Dan Grossman. I'm VP of Marketing at the Nashville Symphony in Music City.

[1:00:00]

And I was just thinking about AI, and I wanted to get your thoughts on AI and how it is going to impact business here coming very soon, and how that is going to impact innovation and the cost of innovation.

JORGEN: I would give you a response but I needed to get ChatGPT going to create that response. [Laughter] No, AI is transformational, right? And I think it's going to permeate all industries, including



this one. How it does is really up to you, right? It's up to the brain power in this room to figure out how to harness it and harness it for good.

I think that it's going to change the industry in ways that we don't even understand yet. I'm just being honest. I can't give you an answer of how it would create that change, but I think it comes down to those sessions of forcing yourself. You know, how do we disrupt ourselves? And that has to come from the top. You know, leadership has to make it a priority to create that dialogue.

So I can't give you an answer of how AI will. But what I can state is that I have confidence that it will transform. And how that comes about is up to you.

FARNAM: I think you're right, that ever sector of the economy is going to be impacted. I mean, it's been impacted by digital transformations as we have seen over the last several decades, and AI, the current generation of AI, the major difference here is that the pace of it is unprecedented in human history. So that's what I think is spooking a lot of people.

[1:02:01]

In fact, I was talking to one of our faculty who was telling me—and he's been at this business for a long time. I'm a computer scientist but I'm not an AI specialist. He said he is, in fact, surprised by the pace of change that we've seen over the last year and half. There is no question that regardless of what sector of the economy you look at, some jobs are going to be lost. Some jobs are going to be done much better, more efficiently, and with better support for human beings to do their jobs. And I am convinced that there are going to be all sorts of new opportunities created, regardless of what sector of the economy that you look at, as a result of access to technology and what we see with AI.

I actually think there may be some really amazing opportunities by bringing, essentially, the virtual and the physical world together in the area of entertainment. We talk about that on my campus with my colleagues, in our drama program and in other programs. I think that this notion of a virtual and a physical world coming together, there are some huge opportunities there.

But it doesn't mean that you throw away everything that you're doing. You have this amazing foundation, and then if there is an opportunity there, you can experiment with it to see if that really evolves into, to your point, a new market. And I can say that about our drama school, which is, by the way, the number one drama program in the world, as I can say about our music conservatory as well. But the world is changing definitely. But that was a great question. Thank you.



JORGEN: And just to follow up on that, this is a common question about robotics and AI. All of that, everything like it's going to take our jobs and everything, right? Perhaps some jobs, right? The salient point is that nature abhors a void, right? We have heard the human race, we evolve. The jobs are going to change. If you went back 30 years ago and said, hey, I'm going to be a app designer for android, people would say, what is that, right?

[1:04:00]

And how large of a market is that today? And how many people are working on that today? The Pony Express was great in its time, right? Jobs just change. And AI and robotics are going to create perhaps more rapid change, but we are still human beings and we are not going to just roll over. We are going to evolve and adapt as these new tools—which is all that they are—are presented to us. Just like the wheel was presented to us and created all new industries and markets. Robotics and AI are just tools to help us do things better. It is just that simple.

FARNAM: Do we have any other questions or comments from the audience?

MARTY: Farnam, can I add just one thing?

FARNAM: Of course, Marty. Go ahead.

MARTY: I have a prediction on AI in the orchestra world, which is, I think the first place that it's going to make a big difference is in marketing. And the ability for an algorithm to monitor which social media posts are working and ones are not working, and then to double down on the ones that are working and to eliminate the ones that aren't working. And to do that at a pace that is not possible if you are the social media manager, right?

I mean, that type of automation tool, there are vendors that are developing that and offering that now. I do not know how good they are today, but I am sure that in a short amount of time, whether it's one year or two years, etc., that will be a dramatically better and more powerful tool.

And if you think about our challenge, which is to captivate the interests of people who don't already know that they're interested in coming to hear what we present, what is the message that works there? You know, you're trying to tell a story or to project a story or to create curiosity and intrigue, and which post works well for that? Which one doesn't work well? How many experiments can you



run? How many hundreds of different social media posts on different Facebook, Instagram groups, etc., across how many different market segments and demographics, etc.?

[1:06:12]

You know, to do that as a social media manager in marketing I think is an enormous task. If you had a really smart algorithm working on your side and you could do literally hundreds of experiments in a 24 hour period, and know what worked and then doubled down on those, I'm excited about that. And I think that all of our marketing teams should be thinking very hard about, how do we get connected with the right vendors that are doing this, run the right trials and really figure out how that is going to change the way that we allocate resources.

You know, it is going to be in the use of that tool where the change is going to take place. But I think that that's an easy first horizon for us.

FARNAM: And [they are already] doing it with pricing, a lot of them.

MARTY: Yeah.

FARNAM: You know, in terms of trying to get that price in alignment, always changing it. And I think that that will really—and that's a great example, Marty, because I think the sports industry is already doing this. And it's not a huge stretch to see the impact of that that would be on the symphony and other forms of [exchange]. That is a great example. Yes?

EDWARD LEONARD: Hi, Edward Leonard with The Chamber Orchestra of Pittsburgh. I wanted to ask Marty a question, and then segue that into a different question, which is, Marty is very unique in that he came from a business background and a passion for music and then moved into the business of music. And in talking about innovation, I wanted to get his perspective on the challenges that are involved. Because I know Marty and he is really into innovation and into making this more relevant, and what push back or what encouragement he got on the side.

And then segue into this kind of niche kind of mentality. And I think it's very—when I hear that, it's exciting, but at the same time I realize that our base is a very slow burn in the music world.

[1:08:05]



So for those of us that have maybe limited capacity for performances in particular, how do you reach out to those niche folks without isolating your core audience, which is the vast majority of it?

MARTY: Well, I'll tell, I have been in this role for two years and it's been the most humbling experience of my life. So I will tell you what I think I've learned about the challenge that we face. Much of what we do is invisible to ourselves. You know, we're operating with very thin organizations and a lot of institutional knowledge on how things get done. As I mentioned, we sort of have a template for what a season looks like or what a performance looks like, and we propagate that forward.

And I think one of the things that is invisible to us is all of the unwritten influences from the different stakeholders on that overall work process. So it's not just the music director and their influence. It's not just the board member or the subscriber or the musicians or the staff. It's a little bit of everybody.

And from an innovation standpoint, we can want to take risks, and we can say that we're going to take risks. And as I said earlier, I don't think that there is any shortage of good ideas. I think that our essential challenge is to crack open what these work processes are, and to really become aware of the water that we're swimming in. You know, as the saying is about the fish and the water, and one fish says, how is the water? And the other one says, what water, you know?

So I think we really have to pay attention to the way that work gets done, because it just happens naturally. And it happens naturally because that's the norm, right? That is how it was done last year, so that's how we're going to do it this year. And every time we want to inject something new or try something different, we have to pay attention to that.

[1:10:03]

So if you take the need to be open and to be curious and to look for outside partners, you then have to couple that with the need to really ask yourself, how is something going to get done? Who is going to do it? What are the assumptions that we have?

And it can't just be asked one time. What I find is that you can answer the question once, and then six weeks later, because a little bit of time has passed, you're going to slip right back into the old habits, because it's what is comfortable and it is what people know.

So it's like a continuous process of always asking yourselves, are we on track? Do we have the right partnerships? Do we know how we're going to measure success? What is the purpose of this



experiment? Why are we putting these side messages up on the screen? How are we going to know if it worked?

And it's developing a culture and a way of constantly asking that, because otherwise, for any existing organization, the easiest thing to do is to return to your comfort zone. That is the norm. And that is what we should all expect. Every time that we choose something new, the very first time that we hit a hiccup, the default is going to be to return to your comfort zone. And we have to catch ourselves doing that constantly. So I don't know, Eddie, if that answered your question, but that has, for me, become very, very clear over the last two years, that our biggest challenges are to stay on top of what we know that we want to do, and what we know we want to expand and change. And to never let go of that.

And I will offer one final thought, which is that if you don't have an outright passion for what we are doing, you're going to struggle. Because I find that the drive to stay at it comes from the real passion for what we do. And I am inspired by the region that we live in, because I grew up in Pittsburgh and I saw all of the steel mills collapse. And the fact that this city reinvented itself tells me that the impossible is possible. You just have to be dedicated to it, you know?

[1:12:03]

And I really believe that we can transform the orchestra industry. There is something on stage for everyone. There are voices to express themselves for everyone, from every walk of life, every ethnicity, every racial background, etc. And it is our job to figure out how to enrich that stage and to enrich the audience. And it's that type of dedication and passion, which I know is possible, but that is the only thing that will give you the energy to keep catching yourself every time that you return to the comfort zone.

MEREDITH: Yeah! [Laughter and applause]

BRIAN FESTA: Thank you, David. Hi, my name is Brian Festa. I'm a performing arts medicine specialist with the San Diego Opera. And in all of these notions that we speak about, innovation and we are speaking a lot about ideas, which apparently come from our brains. And there is a worldwide phenomenon that people are starting to take better care of themselves.

And so with all of these ideas that we have, I find that there is a lot of talk of what we can do, and all of the things that we can do, and new things that we can do. But all of those things are coming from our



bodies and from our minds. And so we're doing an innovative thing. God forbid we take care of ourselves.

At the San Diego Opera, where we have an initiative for health and wellness for the staff and for their full time chorus, and eventually when the season starts, for the musicians that are contracted from the symphony.

[1:13:58]

So I'm curious what the panelists have to say about the types of initiatives that could be similar and productive in order to be tuning our minds and bodies as an instrument, so that we can have more of the capacity to create these ideas and innovations in this industry. Thank you.

FARNAM: Who wants to take that one? Meredith?

MEREDITH: I am going to be a contrarian about this. And I have some battle scars, you know? So maybe that is where this comes from. But I'm going to say, if you are running an organization now, it is a different organization than you were running pre-pandemic, right? That's why we're all here. You have to change. We all understand this. And innovation creation—and people who are artists in the room know this—it's not clean and it's not easy. And you're getting in the ring. You are getting in the ring when you do it.

And so you are going to get—not always, but it's not going to be easy, and you might get a little beat up. And I wish that that weren't the case, and maybe smarter people have figured out a way to make it easier. But if you are leading an organization right now, you are in a spot where you need to lead transformation, most likely. And that's not always the healthiest place to be, but you sort of have to ask yourself that old T.S. Elliott question, do I dare disturb the universe? And if you are leading an organization you have to be willing to speak in the affirmative to that at this point. And it comes at a cost.

FARNAM: Are there any other thoughts from the panel?

MEREDITH: Do you have a better one?

FARNAM: Rebuttal?



MARTY: Well, Jorgen said that one of the principles is that people come first, and I completely agree.

SPEAKER: That's a [UNINTEL]. [Laughter]

[1:16:01]

MARTY: But I think that the challenge for all of us is to keep that in mind, but also to give ourselves permission to be exhausted and to be upset and to be rubbed the wrong way, etc., and then to move past it. And so I think there is—you know, wellness can teach us a lot about creating recovery, and creating space for recovery. And I wish that I was better at incorporating that into my daily practices, but I certainly try to pay attention to it.

And I think that while I totally agree with Meredith that the number of days that very uncomfortable things are happening, or very long hours are needed, and when you are trying to be innovative and entrepreneurial, there are just no short cuts. And like I said, if you are in your comfort zone, you're not moving forward. You have to be in your discomfort zone, and that is a conflict driven space.

So it feels to me like, in the end, what I try to get to is, if I'm not uncomfortable, then we are not doing enough. But I have to find a space to inject some wellness into the practices or it could end badly.

FARNAM: The only thing that I was going to add was that, all of you are battle tested, given the experience that you have had over the past three years of dealing with COVID, which has had, you know, an unbelievable impact on society, and in every sector of our economy. But certainly in businesses like your, and in businesses like ours, who were impacted disproportionately, there is no question that you still could walk away from all of this, recognizing that you are very much battle tested for the challenges ahead.

We probably could take one more question and then wrap up our panel. I want to be respectful of your time. I know we stand between you and hopefully lunch.

[1:17:58]

DIANE WITTRY: Thank you. I'm Diane Wittry with the Allentown Symphony. I have a question. I'm the music director there. I like what you said about that we have so many ideas and so many choices. 520 8th Avenue, Suite 2005, New York, NY 10018 1602 L Street, NW, Suite 611, Washington, DC 20036 **americanorchestras.org**



With your industries, do you choose—how do you weigh serving a few in a deep and meaningful way, versus serving maybe a lot more in a broader way? Because I think that that's one of the things that we have to make decisions on, so I'm just curious about how you evaluate.

MEREDITH: I just spoke, so do you want to take that?

JORGEN: So just to clarify, you're talking externally versus internally. Because you know, you can apply that question both internally and externally. But from an external purpose, you know, it's just what makes sense, right? It's just a gut decision. And there is no right answer, right? And it also depends on your objective. If you are innovating and exploring, I think go for the few, right? You explore and you try new things, because those few could turn into the many.

It goes back to, maintain your core, but as you are branching out and brainstorming and thinking about what is next, focus on those few. Because that is most likely where the innovation is going to come from, versus the masses. You know, I always say engineering that is designed by committee is doomed for failure. So now I'm taking it inward, taking that question internally.

As you are exploring and innovating, too, you want to explore and get good ideas. But at a certain point, you can't have too many cooks in the kitchen, too. And you've got to get a SWAT team together, if you will, to really run that idea down, who have the passion for that idea and who are going to really embrace it and run it down.

[1:20:16]

So I hope that you don't mind. I took that question both externally and internally. But I don't know if anyone else had anything else to add.

FARNAM: You know, with that I want to move to just get a quick [ground pulse]. I want to invite each of our panelists to summarize in one comment or in one lesson that was so important to your success. Your personal success and the success of your organization. And I know that it's harder to come up with one lesson versus 10. So who wants to go first? Jorgen?

JORGEN: Sure. All right, it goes right back to what we talked about. You know, the people first. I truly believe that if you take care of people, everything else works itself out. Technical success, growth, profitability, etc.



Now you have got to get the right people, right? First you have to put the right people in the room. But once you have those right people, if you focus on them, then that is where the innovation comes from. That's where the ideas, that's where the passion, that's—in 2018, that's where I really laid out our guiding principles and core values, built on trust, respect, integrity and the guiding principles that I describe earlier.

And I don't think it's coincidence that when we focused on core values and the people side of it, versus building the best products or grown and profitability. The second that we did that, that is when everything just fell into place.

[1:21:55]

So for me, it's getting the right people and taking care of them, including their wellness. Because if you do that, if people are happy, they will bend over backwards for you, and you don't have to even ask them. They will just, you know, do whatever it takes to succeed because they love coming into work every day. So that is my one lesson that I've learned over the years.

FARNAM: Thank you. Meredith?

MEREDITH: Mine are the persistent and meaningful collaborations and partnerships. They can make you expand your capacity and make you bigger than you are, and lead to really unlikely concepts and programs.

FARNAM: Marty?

MARTY: I guess I would summarize it by saying, first of all, you are not alone. And I think Wigle Whiskey was a very—and I know that you've worked a lot in automotive, which is another industry that is not apt to rapid change. So we are not alone in the need to try and innovate in a very staid tradition. And I think that the cultures that we need to be building and fostering are ones that are built around genuine openness and curiosity, so that we can bring in the partnerships and the help that allow real innovation discovery processes to thrive.

And if you are not in a little bit of discomfort, if you are not experiencing discomfort, it probably means that you are not making the progress on that culture, because you are too used to how we're getting things done in the past, and that is not going to lead to innovation. So be uncomfortable.



FARNAM: Wow, those were wonderful. So let me first of all thank the audience for being here. [Applause] And please join me in thanking our distinguished panel. Thank you. [Applause]

END OF TRANSCRIPT # #