

Sandy Fershee on Human-Centered Design and the Automotive Industry

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SPEAKERS

Sandy Fershee, Olga Stella

Olga Stella 00:00

Hi. I'm Olga Stella, the executive director of Design Core Detroit and the Vice President for strategy and Communications at the College for Creative Studies. Thank you for joining us for season three of the Detroit City of Design podcast. As stewards of Detroit's UNESCO City of Design designation, we aim to raise your awareness of how design can create conditions for better quality of life, and economic opportunity for all. In Season Three, we will hear from thought leaders who view our world through a lens of empathy and applied design thinking to address some of our world's most pressing issues.

Olga Stella 00:49

I'm here today with Sandy Fershee, lab director at D for Detroit for its Human Centered Design Group. As Ford sets out to solve some of our world's most pressing mobility challenges. Sandy is leading a Human Centered Design Team pushing the edge of Ford's future strategies through design thinking and Human Centered Design. Prior to returning to her home state, Michigan and working at Ford, Sandy led creative teams and innovative projects at Motorola, Punch Cut and through a design agency she founded and ran in New York City. Sandy holds a degree in anthropology and women's studies from the University of Colorado Boulder. In this episode, we're going to hear why human centered design is the answer to transforming the automotive industry, businesses, and many other organizations.

Olga Stella 01:39

Well, welcome, Sandy, thanks so much for joining me for the Detroit city of design podcast.

Sandy Fershee 01:43

Thank you so much for having me, Olga. I'm really happy to be here.

Olga Stella 01:48

I'm really happy to have you here too. And just to talk more about your role at Ford Motor Company, which is such an iconic automotive company that has pioneered the way that we all move not just here in Detroit, but around the world. And, you know, over the last 100 years, our world has really changed in so many ways. So tell our audience a little bit more about what drove the Ford Motor Company to create D. Ford. And, you know, what, what's his purpose within the company? And, how does it function?

Sandy Fershee 02:21

Sure, yeah, I'd love to start there. We exist...So first of all, D Ford is our Human Centered Design organization. And we exist to really help accelerate, where the world is moving toward, especially for a large legacy organization that's focused in the automotive space, 117 years old. And we exist to push the edges of our strategies. And it's about ultimately designing the most winning products and services that our customers are going to love and really help to create value for the business as well. And for the world, because it is about reinventing essentially how people move, you know, as we progress into the 21st century. And I can talk a little bit too, about how we do that.

Olga Stella 03:15

That would be great.

Sandy Fershee 03:15

Okay, great. For you know, for those listeners who may not be as familiar with human centered design. Ultimately, it's a way to creatively solve problems. And, you know, the other thing I'll say about that is it's to do that creative problem solving. And it must be accompanied by taking action. So really working with the right partners in a business, to make choices about where to focus and why and then implementing the best solutions. But I'll talk a little bit about how to, you know how to do that creative problem solving. Really, it's about spending time with people and building empathy around that. So we're observing people in their lives, we're getting inspired by the world around us, we want to build understanding, we want to identify any unmet needs that someone might have, and the opportunities we could do to pursue new solutions, you know, around some of those unmet needs. And then what we do is use our design crafts to quickly experiment and make our thinking ideas really tangible. So we, you know, we call it prototyping. And it can be very low fidelity, it could be a sketch, it could be using cardboard, it could be a quick digital prototype, to just say, Well, what would that idea look like? And by making it tangible, we can build on each other's ideas, make it better, throw the ones to the side that aren't working, because don't get it right right out of the gate. It is an iterative process. It's, you know, there's rigor in that so we work together to make them get to the best possible ideas, and then decide where to focus and actually go ahead and implement and pursue those so that we can get them into the hands of customers as quickly as we can. So that's ultimately, you know, what we're trying to do and just being integrated with the business and our business leaders to again, really make those choices around, like where we should focus and why. So that we are creating the best new products and services for the future.

Olga Stella 05:21

So in a nutshell, the D Ford team is not only working with different business units within the company, but also with the customers to try to ideate what that direction should be. Is that is that a good way of...?

Sandy Fershee 05:35

Yeah, absolutely. I could, I could share a story too, if, if that might help bring it to life a little bit?

Olga Stella 05:42

Absolutely.

Sandy Fershee 05:43

So I had the great pleasure of working on the 2021 F 150 that's just coming out. And what that meant was in the early stages, you know, it's like F 150. This is the most popular vehicle in the United States. And we need to make some decisions about you know, what's next for the F 150? Well, we spend a lot of time with people. And we're, again, we're trying to identify what are the new opportunities, where to focus and why. So I'll talk about how we how we sort of landed with with one of those opportunities, but we spent time with people, it could be a couple of days at a time we are with them at work at home, during play, during errands, there's sometimes exciting family moments, you know, or they might be pursuing hobbies, there's some boring, trivial moments at work or at home. So we really get to see a lot of what their lives are like, I was in Colorado with a pickup truck owner. And he works at a very remote oil field. And well actually multiple oil fields all over the western states. He works really long, hard hours, like 14 days straight on the job and then get several days off, doesn't get a lot of sleep on the site. So when he finishes that 14th day, you know, he's ready to go home to his wife and his two kids, and starts his you know, 14 hour drive home. But he can rarely, you know, make the 14 hour trip at that stage after 14 days on work without stopping. And you know, he's doesn't want to spend the cash or really stay overnight in a motel. So what does he do? He pulls over in his pickup truck, he sleeps for three, four hours at a time. And you know, sometimes it's too hot, sometimes it's too cold, but he doesn't really want to run his truck that whole time. So he gets a little bit of shuteye, but it's not really a quality rest, I would say. And this is just one example. But when we all kind of came back together from our research time with many different types of customers, we soon learned that every person we'd spent time with were sleeping in their trucks. And sometimes, yeah, it was quite remarkable. And we thought, you know, we're all talking about them perhaps is like, this might be anecdotal, but actually, there was a pattern here. It could be a midday nap at the job site, or I was also with another family with a couple where they loved to go on adventure trips that were all over the West, they would also drive anywhere, you know, from eight to 14 hours away from their home on these adventures. And they would also sleep in their their truck instead of you know stopping at a hotel along the way. So what did we do? We started to explore, like, Can we make something like a lay flat seat for our customers, you know, sort of like the airline first class and airline seat? You know, could we do that it and do it in a way that's not too cost prohibitive. And we have so many incredible engineering experts in this arena. But we chose to focus on this and really explore it, drill into it prototype, what are the ways in which we could do that and do that in the most simple, robust way? And with the least amount of complexity, that could provide something really differentiated and would really delight our customers who we know use and love their truck for so many things in their lives. And this would really just take it to the next level. So we you

know, again, we just we this is one example of how we might create and prototype and test those ideas with customers based on some of those unmet needs.

Olga Stella 09:39

And so as the ..that's a great example because it just makes such a direct connection between those unmet needs and the needs, you know, the needs of the company as well to keep keep creating products that people want. When you think about that the way that human centered approach is deployed in both Ford and in the company, and what are the key elements that you think really distinguish it, you know, just from, you know, other ways of maybe trying to develop what those those new approaches should be?

Sandy Fershee 10:15

Well, I would say that what I think this capability around Human Centered Design brings a consistent application. And I'd say, our rigor in the sense that it is actually difficult to come up with great new solutions. I mean, you know, every once a while you can evolve on idea and really win with it. But to break through requires a focused team who understands what that need is, why it's important, and work together to try to come up with solutions that can really meet those needs. And when those teams are focused on the right problems to solve, and are able to actually then make choices to deliver them. That's what ...when that's embedded in the ways in which people work, especially in a large enterprise, you tend to more consistently deliver those winning products and services. Because again, there's, you know, starting any project, you might come up with 100 ideas, but what are the ones, you know, what are the ones that are really going to make a difference? And you do have to make choices. This is, you know, you know, strategy is about choices. So it's about making choices of where to focus and why that could, again, like bring the most value and delight to our customers, and, you know, and, and adds new revenue opportunities for the business as well, you know, we're looking for the full win-win on that front. And again, when that's embedded in the fabric, you know, we tend to come up with a better value proposition overall, versus trying to do you know, 100 ideas, little ideas that might be disparate. I've seen it were it becomes like an all a carte menu, like a feature venue, I'm sure many designers out there can relate to that was like we didn't do this, we could do that. We're looking at it holistically and saying, what are the things that are going to matter most? How are those connected? And how can we deliver, I can give one other example on that front too, because, you know, again, when we're looking at our truck customers, and we're observing them, say, on the job site, and we're looking at the full context of how they're kind of moving through their day, the types of tools they're using, and where they're using that. So we looked at integrate a set of, you know, we call them tools, which the truck is the meta tool, but there's a, you know, a set of tools, essentially is part of the truck to help them be more productive in their work. So when they arrive early in the morning at the worksite, and it's dark, we can provide exterior lighting, zone lighting that essentially lights up the area around the truck, so they can prep for their day, you know, we know that the you know, it's essentially a hub for them, they're at the back of their truck. So we can provide a working surface, essentially, the tailgate becomes this whole entire work surface, where we've provided a sort of divots, and ways to that people can store their pencils or a place to set their phone down that's not going to easily drop off. There's a built in ruler. And then of course, one of the most important things too, is like providing powers, people are actually using power tools in the back of their truck. So all those things, combined together, are actually providing tremendous value in these different ways that people are living their lives. And of course, in

the work context, it's about being the most productive they can be. And when they're out having fun, it's about amplifying their joy out in the wild and being able to plug in the mini fridge or TV when they're tailgating. We get that power in the back of their truck and, and socialize around the back and have lighting around them. So it actually, we found that it actually was suitable for so many different contexts and would provide the right value. So we chose to focus again on you know, it's like the one plus one equals three, like what are the right combination or combination of things that are going to make this even better?

Olga Stella 14:29

And so as you develop these tools and techniques and team based approaches, how do you see the culture at Ford Motor Company, you know, start to shift and evolve?

Sandy Fershee 14:41

Yeah, it is. It's evolving really quickly because the world really demands it. Honestly, you know, the context is changing. We have to adapt, evolve, work in more agile ways. And you know, and leverage some of the new technologies that are out there around digital software to create new services for our customers. So we're just looking at how can we move more quickly? How can we bring a more of, say, an MVP mindset, to the ways we're working, if we have small focus teams, again, dedicated to solving a problem, and, you know, when you when you unlock, or I guess, when you put a focus team on a problem, they understand the challenge at hand. And they have the information about the inside of like, what we're trying to solve and why there's numerous ways again, that you could solve that problem. So it's about unleashing the kind of the collective passions, creativity, of a cross functional team to really work through and come up with the best possible solution. And, you know, in my experience, you know, sometimes it takes a little bit time to build that momentum, meaning you might come across folks whose initial reaction is, that won't work here. I've tried that before. And, you know, as I guess, you know, stewards of the human centered design process, we really tried to bring them mindset of, you know, what's possible? Like, let's, let's dig in together, let's say what if like, well, what if we did this? or How else could we do it? And really framing the questions for the team to, again, I'd say, move beyond that, that first sort of set of assumptions that, you know, may still be accurate, but could we explore for another two hours or two weeks, and say, well, let's better understand it, let's dig in a little bit more, or if that has been done before, let's go talk to that person, and understand what they learned along the way, because maybe it was the right idea at the wrong time. And I saw a lot of it, too, is just about asking the right questions at the right time, to get people inspired. And, you know, continue to pursue and explore and experiment, so that you might break through to what's what's possible in the future. Because again, it does, you know, this day and age, more and more, we, you know, we have to think differently, we have to move quickly, you know, and leverage all of our amazing talents, passion skills that we have, and the latest technologies to, to help break through to the things that are going to really matter most to our customers.

Olga Stella 17:34

You know, I think sometimes people, you know, they hear, they learn about human centered design, they learn a little bit about this process, and, you know, so much of what you have described is about, like, deeply listening and being open to learning. And, and, you know, like, really engaging with people, not at people. And I think that tends to sometimes, you know, scare decision makers around like, well,

that's gonna take so much time, how will we ever, you know, have the time to do that? And I, you know, we've talked a little bit, you've told me a little bit about project Apollo and, and some of Ford's COVID response, maybe helping our listeners kind of understand, you know, does this take a long time? Or is that a misconception about what human centered design is?

Sandy Fershee 18:22

Yeah, it well, it runs the whole gamut is what I would say, sometimes you have a big wicked problem where there's lots of ambiguity. And you know, it might take some time to break through, but you can break it up into chunks to learn something new, and then decide what to do next. But in the case of project Apollo at Ford, which was Ford's response to the the COVID pandemic. And what we learned, of course, is we had laid the foundation, we have a lot of capabilities that have been in place for many years in manufacturing. And of course, with D. Ford, our prototyping and design and research skills, we found we could pivot right away to the to the crisis at hand. You know, we so what we did was said, How can we help? And that was a response across the board from Ford, we knew there was a need for personal protective equipment, there was a shortage. And many folks across Ford said, Alright, how do we how do we help? How do we come together? And D Ford said, you know, we're in what can we do? Because if we were going to provide some personal protective equipment, what equipment could that be? We found that face shields were in high need, and of course, very protective. There's still a lot of unknowns at that point about how is even being transmitted but our health care workers and frontline workers really needed that equipment. And so our team just immediately jumped into action. And what was amazing -talk about speed- is in a one week period we moved from Okay, we have a problem to shipping the first 10,000 face shields to local health care workers in the Detroit area. And what that meant... yeah, it was incredible was so I, you know, I'm blown away by what our team was able to contribute to that. And again, it was just a small focus team, and immediately got with health care workers talking to them, understanding what their challenges and needs, were immediately starting to use some just basic materials to prototype some facial shapes and what materials might be necessary. We also, of course, like you don't have to start from zero, we looked at open source designs that were available through different universities on face shields, were a great, this is a really good one. Why don't we start from here, we can adapt and evolve. And that was how we moved really quickly. And then the next step was also, of course, like, Alright, what materials do we have on hand supplies within our current manufacturing facilities, that we could use and leverage to make these products? And, and so then, of course, you have to test out like this or that. And we, we experimented with some of those pieces until we got it, you know, just right. And again, we're moving at a very fast clip throughout this whole thing, as you could imagine, in order to get 10,000 face shields for the week, the but we did, and again, every step of the way, checking back with our health care workers to see like it, what kind of adjustments we needed to make to the fit and, and got them out to health care workers. And what's amazing is, you know, we have continued to make and distribute, we've now made over 22 million, and deliver them out into the world. Yeah. And, and also some other amazing part was we just said, Okay, now we have all these things like how do we, what's our distribution strategy? And so we even had folks on our team who look to the power of data to help us there. So they we examined where there were COVID hotspots, and then contacted folks within those communities to make connections, and then ship and distribute to those those areas that were in most need.

Olga Stella 22:22

That's wonderful. And I think just such a such a good example of both the kind of agility of this process. But you know, but it also hearing you and just, you know, not every not every project necessarily, you know, all these projects have to have the right approaches based on kind of what their, you know, end goals are. I know, one thing that we we think a lot about at Design Core as stewards of the UNESCO city design designation for Detroit, is the role that design has in creating more inclusive, equitable and sustainable communities. And just as you've implemented Human Centered Design at Ford, but at many other places, too, you've worked with so many different brands, you know, not just in Detroit, and New York and Chicago and all over the world, you know. How do you bring in the role of just diverse perspectives into the process? And how do you kind of ensure that the products and solutions that your teams are developing, whether at Ford or other places, really allow everyone to participate?

Sandy Fershee 23:28

It's a great question. And so important right now, because, you know, everything in our world has been designed. And so to address inequities, and injustices requires intentional design, as well. And our team has been very focused to ensure that we are connecting with the right types of community members as part of our research practices, as well, as you know, the way in which we get inspired around the world and get informed is speaking with subject matter experts. And of course, there's a whole field emerging around designing for equity. And so we also look to partner in order to do that really well, depending on the scope and scale and goals of the project at hand. Because a lot of this is about co-creating with the communities where whatever we're designing, you know, can impact - it impacts a lot of different folks. And so it is a very important piece of the intention of how we design in the future to address those inequities. And you know, Ford's purpose really is to help build a better world where every person is free to move and pursue their dreams. That's pretty inspiring. I have to say, I'm very... having that as our as our purpose and our reason for being, yeah, inspires us to think about, you know, everything we're doing and how it will impact the future, and can we leave the world in a better place, and Bill Ford speaks about this all the time. And he has a whole company behind him on that.

Olga Stella 25:21

That is such an inspiring purpose. And it really requires the intention that you've, you've spoken about, and, but also just deep transformation, especially in light of just everything that has happened, not just in the last year with the pandemic, and all of the, you know, different, injustices that, you know, like that, that have persisted for many, many years, but continue to be revealed, you know, to the, to the greater population. And so just thinking about that kind of deep transformation requires a lot of change and new ways of working, relating, collaborating. So what, what advice do you have? I mean, maybe first, we start with companies thinking about transformation in their own businesses, but I think it also applies to other kinds of situations, but what what advice do you have? How do you start to confront some of these barriers, to transformation, and to changing a culture that leans into transformation?

Sandy Fershee 26:23

It's takes a lot of strength and perseverance, I would say. But what I would also encourage is to bring a mindset of optimism and possibility. Because there's, there's a lot that is possible and was in it, and can be within the influence and power of individuals, small teams, I've seen it work. I know it works. Sometimes it's really challenging and difficult, but I would just encourage, you know, anyone who, who

feels passionate to help drive that change, to you know, put one foot in front of the other and start to make those efforts. You have more power than you might believe you do have. And a lot of the times it's just... you keep can't boil the ocean first of all. Like, of course, I know, so many amazing people, myself included, or sometimes have a grand vision of like once, where we're trying to move to and why. But you can't, you can't bite off all of that .

Sandy Fershee 27:25

So it's about starting small, you know, find a, you know, find some sort of guardrails of like, where to start and why and again, you know, be intentional about that, and, and then go where there's energy and people who believe in that. And because once you start talking to people about this idea, someone's like, Oh, you should talk to this other person over here, they have been thinking about that, or have done some work in that area. And so find those people who are passionate about it, could champion it, or want to join you in experimenting, and trying to lead some of that change. And I've seen very small groups make a big, big impact. So when you have that kind of small focus team, who are applying their skills to experiment, or show how... show the power of a new solution that's going to make our world or our workplace or a product better, you know, show it to people and other people who believe in it will start to, again, be your champions, and you start to build momentum from there. The next thing, you know, you can take the next step and say, well, like either how would we implement this? Or do we need to go answer this other question next? So you can take a you know, sort of a phased, step by step approach. And then and tell the stories of what you're learning. The stories are so powerful, and again, it attracts people who are passionate, supportive, or want to join in. And so those things can be can be really powerful. It's just like, one put in front of the other, make some more progress, tell the stories, get people involved.

Olga Stella 29:13

Well, and you apply this approach at, you know, at Ford, at a legacy company that's trying to respond to the changes in its industry. And I think there's a lot other legacy companies and industries that need to respond to change to learn from that. But, you know, you're we're also in, you know, a city, a legacy city like Detroit that has an amazing historical legacy, but also challenges and so do you is there you know, and inspiration or advice from this kind of a process that might also relate to the kinds of changes that community leaders, civic leaders, residents are trying to drive in their in their city?

Sandy Fershee 29:56

Yeah, I think I do believe again, bringing, bringing a human centered toolkit working with folks, again, who have there's a lot of open sourcing and designing for equity toolkits as well. But bringing that to bear can be really powerful. And sometimes it's, you know, bringing the mindsets like are.. we talk about our mindsets within design thinking Human Centered Design, it's about being collaborative - building empathy. We are being curious, and, and optimistic about again, like, what what might be possible. And so modeling those things, when you're trying to transform or bring change forth, is incredibly powerful. Because people typically want to join in when, when those mindsets are part of how one works. And also when you're bringing, you know, some of the methods and tools from human centered design to play around, you know, building up the coop-, who are the people we're trying to create for? And what do we know and understand about them? And how can we build something better? And, and, and, and again, bringing the more experimentative mindset, it's like, not getting

anything too precious, just try things and experiment and leave the things to the side that aren't working and pursue the things that are and, and test and learn and implement. I feel like it's this. For me, I mean, obviously, you know, products and services that one puts into the world, there's still sort of an iterative process, even once a product is launched. But take that mindset, even to running a team. And like, we have to apply the same methods and tools, honestly, to what it takes to create the conditions for creativity to thrive in a variety organization.

Olga Stella 32:02

That's right.

Sandy Fershee 32:03

What else like we have to, we have to pause, we have to reflect, with have to learn. So say, Okay, what do we what should we do next? Like, okay, that worked, that didn't? How can, how can we evolve? And for us, that's meant, you know, because our, for our teams, you know, for creativity to thrive, we have lots of rituals around how we get how we connect with each other, how we stay inspired, and, and learn from each other. And of course, during the pandemic, I feel like we've, you know, we have to continuously sort of check in and say, do we want to schedule more meetings? Or, you know, because we're feeling meetings overwhelming, do we want to scale it back? For that reason, or our people feeling so lonely? Maybe we need to insert a new activity for the next couple of months, just as a completely informal way, because there's no water cooler or huddle around the coffee maker anymore. So we have to try to create an experiment with those things. So that there's still those moments for the creative collisions and just human connection, because we're I think we're all craving and missing that I imagined tremendously. I know, I am. I know, my team is, I think everyone is. So yeah, I think it's just about continuously checking in and saying what else what else can be done in bringing that sort of continuous, like improvement or experimentative mindset to bear in everything one might be doing?

Olga Stella 33:30

Well, I would love to just close out our conversation this morning with maybe some some words of inspiration you could offer, you know, as we, as we have both designers and other, you know, enthusiasts who listen to this podcast. What words of advice would you offer to, you know, designers who are, you know, thinking about how they might impact, you know, company culture, or, you know, be change agents and the place where they work?

Sandy Fershee 33:58

If you have an idea, make it happen. I say, like, Don't hold back, I seen a lot of people, especially in large companies, but maybe this is even pervasive, more holistically, where people might not feel they have the permission. And I'd say, anytime someone comes to me with an idea that like, Whoa, I was thinking about this, I'm like, Great, let's do it. I mean, of course, you know, everything within reason, but like you said, They're amazing ideas, like, Great, let's try that. I would love to do that. Let's see where it goes. And so those ideas like bring them forth. And or even just go and try them. But if you want to have the conversation, first have the conversation and and if for some reason you don't have a leader who's super excited about experimenting, I'm probably on the bleeding edge of that side of things. But somebody else might say, Hmm, I'm not sure just be like, well, could I try it for a week? What do you say? Right. And then show show what happens and tell a little story about it like, well, we did this and

we learned this and had this impact. And and it might be like the impact didn't work as you intended. And then you say, so now I want to try this other thing and stuff for a week, right? Or say this worked like, What do you say? Shall we adopt it as a practice or as a way of doing it? I just love it when people bring their ideas forward. So I, again, I think people have more power than they realize. And in bringing, you know that passion and energy to bear is just so exciting, I think for the world. So I would encourage people to do that.

Olga Stella 35:43

Well, for the people who are on the flip side of that, that maybe the decision makers at companies or organizations, what advice do you have for them, when designers and others come with them with these kinds of these kinds of ideas for for transformation?

Sandy Fershee 35:59

Be open, listen, and ask good questions. So someone might have an idea. But you know, you can you can start to ask the why. So why why do you want to do that? Or if you ask the five why's and kind of peel back the layer and just really listen and understand. And then say, yeah, try. Yeah, I mean, just support small experimentation. Because then you too, as a leader can tell a story of some of the, you know, exciting things your team is doing to help drive the business forward, because oftentimes people's ideas are directly related to either how the work is getting done, or a better way to create a new product or service. And so I think being supportive and asking those great questions, and just being open to what's possible.

Olga Stella 36:55

Sandy ever so enjoy talking with you today. Thank you so much for agreeing to be on the podcast.

Sandy Fershee 37:01

Thank you so much for having me. It's such a pleasure and an honor. Thank you.

Olga Stella 37:23

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